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**Alcohol, illicit drugs, policy and opinion:
Crossing boundaries**

Rosalie van der Sar

Colofon

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Alcohol, illicit drugs, policy and opinion: Crossing boundaries

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*Het hart,
De essentie van waaruit alles begint,
Kostbaar en fragiel*

*Het hart,
Vaak aangetast en blootgesteld,
En niet voldoende afgewend,
Van onbekende sporen.*

*Verwikkeld in een tweestrijd,
Kiezen tussen hang en verstand,
Tussen zwak of sterk,
Tussen toeval of keuze.*

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1

Introduction

Introduction

In the last decades, increasing attention has been paid to optimizing alcohol and drug policies in order to minimize their harmful effects. For example, alcohol abuse affects a wide range of biological and social processes: it alters personality and behavior, is a causal factor for intentional and unintentional injuries, facilitates burdens caused by drunk-driving and risky sexual behavior, and may have a negative outcome on the fetus and negative consequences on brain development [1]. Similarly, illicit drug use is associated with considerable health problems, including negative effects on the respiratory, cardiovascular and immune system, as well as on psychological status [2].

Many governments attempt to minimize these harmful effects by implementing policies to regulate alcohol and illicit drug use, while respecting the individual's rights [3]. For these policies to be effective, not only is the effectiveness of a policy or the measure itself relevant, but also the public support for a particular measure [4]. Greater support for the implementation of a policy measure seems to increase the impact of a policy measure [5].

Moral commitment towards a particular law is one of the most powerful predictors of whether lay people will obey the law [6, 7]. From a public health perspective, policy opinion research has the potential to reveal gaps in public understanding of health issues and helps the public to understand the rationale for particular policies [8]. This indicates that examining the opinion of citizens about policy measures is of value to increase the effectiveness of policy measures.

The opinion of citizens on alcohol and drug policies can be influenced by many factors, including friends, social environment, own experiences, family settings, etc. However, it can also be influenced by national alcohol and drug policies within a particular country. Therefore, to explore the relationship between opinions of citizens on substance use and related policy measures, comparing data from different countries is strongly recommended. Countries that differ in their strictness of their national alcohol and drug policies but have social and cultural similarities, are a good context in which to explore the role of national alcohol and drug policies. Therefore, data from two western European countries on this topic are compared in this thesis: Norway and the Netherlands.

From a social and cultural perspective, Norway is rather similar to the Netherlands. Probably the largest differences are in demographics and the composition of the Dutch and Norwegian population, e.g. the Netherlands has 16.6 million inhabitants compared with Norway's 4.9 million, and population density is much higher in the Netherlands than in Norway [9, 10]. Regarding alcohol and drug policy, Norway and the Netherlands show considerable differences, providing a valuable context in which to explore opinions on substance use and related policy measures, as well as the factors which influence these opinions.

Until now, few studies have explored the relationship between national alcohol and drug policies and the opinions of citizens on substance use and related policy measures, and the factors influencing such opinion. A few studies have shown that alcohol consumption and demographic variables, like age and gender, are related to the support of alcohol policy measures [11-20], whereas studies on the relationship between opinions on illicit drug use and related policy measures are very scarce. Therefore, the work in this thesis aims to explore the opinion of citizens on substance use and alcohol and drug policy measures, and which factors influence this opinion, in two western European countries that differ in the strictness of their national alcohol and drug policies: Norway and the Netherlands.

This introductory chapter describes the background and context of this thesis. First, substance use in the Netherlands and Norway is described, followed by a description of the national alcohol and drug policies in these two countries, and of research on public opinion in relation to alcohol and drug policy. The chapter ends with an overview of the aims and objectives of the study, a description of the study design, and a general outline of this thesis.

Substance use among the Dutch and Norwegian population

In many societies, alcohol is seen as having a social function and is thought to strengthen sociability [21]. In the Netherlands, alcohol use is generally accepted and experienced as being enjoyable [22]. In the years 2003-2005, the Dutch population (15+ years) drank around 10.1 liters of alcohol (unrecorded and recorded) per year per capita consumption, of which 50% was attributed to drinking beer, 34% to wine and 16% to spirits [23]. On average the alcohol consumption remained stable in the period 2001-2005 [23]. In 2007, 84% of the pupils aged 15-16 years in Dutch schools had used alcohol within the last year, and 69% had used alcohol within the last 30 days [24].

In Norway, in the years 2003-2005, alcohol use of the adult population (+15 years) was around 7.8 liters alcohol per year per capita consumption (unrecorded and recorded), of which 47% was attributed to drinking beer, 31% to wine and 22% to spirits [23]. On average, alcohol consumption increased in the period 2001-2005 [23]. In 2007, 66% of pupils aged 15-16 years had drunk alcoholic beverages within the last 12 months, and 42% had used alcohol within the last 30 days [24]. Compared to other countries (e.g. the Netherlands) a greater percentage of the data on Norwegian alcohol consumption is based on 'unrecorded' alcohol consumption; this includes home-made spirits as well private import of alcohol, e.g. tax-free purchases and border trade [25].

In contrast to alcohol use, illicit drug use is less common among the general population in both Norway and the Netherlands. In the Dutch population in 2005, of those aged

15-64 years, 22.6% had ever used cannabis, 3.4% had ever used cocaine, and only 0.6% had ever used heroin [26]. In 2007, 28% of the 15-16 year olds had ever used cannabis, and 7% had ever used a drug other than cannabis [24].

In Norway in 2009, in the group aged 15-64 years, 15% had ever used cannabis [27], 2.5% had ever used cocaine, and the lifetime prevalence of heroin was below 1% [27]. Among the 15-16 year olds, in 2007, 6% had ever used cannabis and 3% had ever used a drug other than cannabis [24]. Therefore, the Dutch lifetime cannabis use among adults and among 15-16 year olds was greater compared with the same age groups in Norway. Differences between the other types of drugs were smaller.

Alcohol policy

The effectiveness of alcohol policy measures has been a topic of policy research for many years. Because of the harmful effects of alcohol consumption, almost all countries have developed national policies to protect citizens against its harmful effects. Before describing alcohol policies in Norway and the Netherlands, the effectiveness of alcohol policy measures in general is described first.

Alcohol policies refer to *'measures designed to control the supply of and/or affect the demand for alcoholic beverages in a population (usually national), including education and treatment programs, alcohol control, and harm reduction strategies'* [3, p.278]. Alcohol policies can be seen as resulting from social and health-related problems caused by drinking, and reflect drinking patterns and cultures in a society [28]. It is a way in which governments try to regulate alcohol consumption in order to minimize its harmful effects [3].

Alcohol policies can be divided into different kinds of policy measures. Anderson et al. [1] divides these measures into nine target areas, shown in Table 1. This thesis focuses mainly on measures related to information and education, addressing the availability of alcohol, and pricing policies.

In the last decades, much research has focused on the effectiveness of alcohol policies [1]. Educational measures failed to reduce alcohol consumption [1, 29], whereas controlling the price and availability seem to be effective in reducing alcohol consumption [29, 30]. However, although educational measures are ineffective they are the most popular among the population, whilst restricting or controlling measures are effective but unpopular among the public [13, 31].

Chapter 1

Table 1: Types of policy measures (based on Anderson et al.)

kind of policy measure	examples
Information and education	School-based alcohol education, public information campaigns
Health sector response	Brief advice for people with harmful alcohol use
Community programs	Education and information campaigns, counter advertising and health promotion, controls on selling and consumption venues
Drink-driving policies	Breath testing
Addressing the availability of alcohol	Government monopolies for the sale of alcohol, licensing system, minimum purchase age, outlet density, days and hours for sale
Addressing the marketing of alcoholic beverages	Alcohol advertising
Pricing policies	Alcohol tax
Harm reduction	Training of bar staff, responsible serving practices, security staff in bars
Reducing the public health effect of illegally and informally produced alcohol	Informal and surrogate alcohols, strict tax labeling

Alcohol policy in Norway

Norway has a long history of restrictive alcohol policies. In a study of Brand et al. that ranked national alcohol policies from most regulated to less regulated, Norway was ranked first place out of 30 countries as the country with the most highly regulated alcohol policy [32]. The Norwegian alcohol policy is based on three principles: 1) restricted physical availability of alcoholic beverages, 2) high alcohol taxes and prices, and 3) a comprehensive alcohol monopoly system [33]. These principles can be translated into the following policy measures [34]:

- Only alcoholic beverages with an alcohol percentage below 4.75% can be sold in licensed grocery stores,
- alcoholic beverages above 4.75% of alcohol (wine and spirits) are sold in state retail monopoly outlets,
- the minimum legal age for purchasing alcoholic beverages is 18 years for beer and wine, and 20 years for spirits,
- alcohol advertising is banned,
- alcohol prices are relatively high compared to other European countries.

During the past 20 years, Norwegian alcohol policy has become more liberal (e.g. increased number of outlets and self-service sales) and more consumer-friendly. Prevalence rates during this period have also increased. However, rather than in-

creased availability, the fact that alcohol became (relatively) cheaper has led to the increased alcohol consumption [34].

Alcohol policy in the Netherlands

In contrast to Norway, Dutch alcohol policy is more liberal. In the study of Brand et al., the Netherlands was ranked 22nd out of the 30 countries [32]. This indicates that the Dutch alcohol policy is not strongly regulated compared to alcohol policies in other countries. Controlling and restrictive measures are not strongly embedded within Dutch alcohol policy. Alcohol consumption is seen more as a citizen's responsibility rather than a government's responsibility [22, 31]. In general, Dutch alcohol policy focuses on preventing harmful alcohol use and on retrieving harm related to alcohol consumption [35]. Therefore, it can be described as an 'alcohol restraint policy' [36]. The main alcohol policy measures are [37]:

- Only low distilled beverages (<15% alcohol) are sold in supermarkets; high distilled beverages (>15% alcohol) are only sold in off-licensed premises,
- the minimum drinking age for buying low distilled beverages (<15% alcohol) is 16 years, and for high distilled beverages (>15% alcohol) 18 years,
- alcohol advertising on radio and television is prohibited between 6 am and 9 pm,
- tax rates are included in the price of alcoholic beverages and are different for beer, wine and distilled drinks.

However, because of worrisome prevalence trends among adolescents, changes in alcohol policy were preferred to try and lower alcohol consumption among young people [35]. Therefore Dutch policy aimed at reducing harmful alcohol use - with a special focus on young people. The main goals are to limit drinking below the minimum drinking age of 16 years, encourage young people to drink less, and to decrease dependency on alcohol use [35].

Drug policy

Most governments respond with different drug policies to the drug-related problems in their country. As stated by Babor et al., there is no solid solution to drug policies that works in every setting or country [38]. An internationally accepted segmentation of drug policy measures is to define these measures into harm-reduction measures, supply-reduction measures, and demand-reduction measures [36]. Harm reduction refers to measures that decrease the negative consequences of illicit drug use (e.g., distributing clean needles) [39], supply reduction to measures that reduce the supply of drugs (e.g. arrest and imprisonment of drug dealers, asset confiscation [40] and restricting availability [36]), and demand reduction to measures that reduce the demand of illicit drugs (e.g. providing drug users with treatment [41], prevention

programs and mass-media campaigns [36]). These different kinds of measures can be seen in both Norwegian and Dutch drug policy.

Drug policy in Norway

Based on the Memorandum 2009 'Norwegian drug policy in international flora' written by the Norwegian Ministry of Health Care Services, the main objective of the Norwegian drug policy is '*to reduce the negative consequences of substance use for individuals and societies*' [42, p.5]. The Norwegian drug policy states '*that all use, possession, dealing and other forms of illegal handling of narcotic substances and prescription drugs may render offenders liable to prosecution in Norway*' [42, p.5]. General assumptions of the Norwegian drug policy are that drugs are and will remain illegal, that all persons with a drug addiction are entitled to a worthy life, and that it promotes a restrictive drug policy. The drug policy is operated by harm-reduction measures, supply-reduction measures, and demand-reduction measures. A good example of a Norwegian harm-reduction measure is the availability of injection rooms. These injection rooms are permitted on a permanent basis. According to demand reduction, there is a special focus on children and young people to prevent them from substance abuse [42]. With supply-reduction measures the government aims to reduce the availability and volume of drugs. Examples of supply-reduction measures are preventing the illegal production and import of drugs, and proper control of the legal trade [43].

Drug policy in the Netherlands

The Dutch drug policy is based on the normalization principle [43], which is the assumption that it is impossible to totally ban the use of drugs with strict and stringent policy measures [44]. Instead, there is a focus on harm caused by the use of illicit drugs [45]. The main principles of Dutch drug policy are that the possession, dealing and production of drugs is punishable, whereas the use of illicit drugs is not punishable [46]. However, the possession of less than 5 grams cannabis is not punishable.

Another aim of Dutch drug policy is to administer, decriminalize and regulate the sale of cannabis [47]. The Dutch drug policy differentiates between soft drugs (cannabis) policy measures and hard drugs (e.g. ecstasy, amphetamines, cocaine, heroin, LSD) policy measures. The segregation of the markets for soft and hard drugs was introduced in the 1970s. By separating the markets, cannabis users were no longer dependent on the illegal market, and switching to other more harmful drugs may be reduced as these were not sold in coffee shops [36]. These licensed coffee shops must comply with strict rules for the sale of cannabis; here, customers can only buy cannabis for personal use.

In the Netherlands also harm, supply and demand reduction measures are aspects of the drug policy [36]. Harm reduction is operationalized by e.g. needle exchange and

the prescription of methadone. Supply reduction is e.g. operated by an intensified trace of dealers and producers of drugs. Demand-reduction measures are highly adapted to young people through educational programs.

In the 1990s, the Dutch drug policy was considered as liberal compared to that of many other countries. However, from 2001 onwards, the tolerance towards illicit drug use changed and more repressive policies were introduced [36]. Therefore, the Dutch policies have approached the more repressive national drug policies, such as the Norwegian drug policy.

However, differences between Dutch and Norwegian drug policies still exist. The main difference is that the use of cannabis and other drugs is not punishable in the Netherlands and that the sale of cannabis through coffee shops is regulated, whereas in Norway cannabis use and the use of all other illicit drugs, together with the sale of cannabis is prohibited, as is any other drugs.

Public opinion research in relation to alcohol and drug policy

There is a long tradition in public opinion research. The work of Page and Shapiro [48] can be seen as a starting point of the discussion as to how public opinion impacts public policy. They conclude that *'opinion changes are important causes of policy change'* (p. 189). Although this does not mean that public opinion always affects public policy, the effects of public opinion are of considerable importance [49].

Alcohol policy is an interesting policy area for conducting opinion research. A large percentage of the adult population drinks alcoholic beverages. Therefore, alcohol policy measures affect many people in daily life and many people are exposed to the harmful effects of alcohol. Thus it is important to know what the population expects from alcohol policy, what their preferred changes might be, and which aspects should be protected [11]. Knowing public opinion about alcohol policy measures could also help to shape developments in alcohol policy [50]. From a political point of view, knowing whether restrictions on the availability of alcoholic beverages are supported by the public, helps to understand the existing societal norms regarding alcohol consumption [12]. Public opinion on alcohol policy measures should therefore be considered as a contributor to the developments in alcohol policy [50]. Moreover, public opinion can facilitate legislative change on alcohol policy issues [17, 51].

Public opinion in relation to specific alcohol policies has only been acknowledged in the last decades [8]. Especially in e.g. Australia, Canada, USA and some European countries (in particular Scandinavian countries), studies have been conducted to investigate opinions on alcohol policy measures. Opinion on control or restrictive policy measures (increased tax or price, regulated sale of alcohol and shorter hours of

sale) were the main focus of most studies and were conducted among an adult population [3, 13, 15, 20, 30, 52].

Concerning *drug policy*, research on the opinion on drug policy measures and illicit drug use is rather limited. However, also in relation to this discipline, the perspectives of citizens are of value. The issue of illicit drugs is one of considerable public interest [53]; it is often part of the public debate and attempts to reform drug policy are frequently addressed in the media [54, 55]. Besides general interest in this topic, measuring views on drug laws is regarded as important to understand the effectiveness of penalties to reduce offences in relation to illicit drugs [56].

Most research in relation to opinions on illicit drugs was conducted in Australia [53, 56-58], and Norway [59, 60] and focused mainly on cannabis, being the most widely used illicit drug. The Norwegian studies also focused on drug offences and attitudes towards illicit drug use.

Aim of this study

The aim of this work is to explore the opinion of citizens on substance use and alcohol and drug policy measures, and which factors influence this opinion. More specifically, this study focuses on the opinion of citizens concerning substance use and alcohol and drug policy measures in two European countries which differ in their level of strictness of their national alcohol and drug policies: the Netherlands and Norway.

To investigate this, various research questions were formulated. First, differences between the Dutch and Norwegian alcohol and drug policies gave the opportunity to investigate which factors influence the opinion of citizens, and whether these opinions differed between the Netherlands and Norway regarding, for example, i) alcohol policy measures that may prevent young people from problematic drinking, ii) acceptance of illicit drug use, and iii) parental measures that prevent young people from substance use. These topics were chosen because the Norwegian policy is stricter and their government takes more responsibility to prevent citizens from problematic substance use compared with the Netherlands, where alcohol and drug use is seen more as a citizen's than a governmental responsibility. Moreover, this difference might also influence the acceptance of illicit drug use.

Second, the literature shows that restrictive alcohol policy measures are relatively unpopular because these measures more directly affect a person's behaviour. However, it is unknown whether this effect is similar for cannabis policy measures. The Netherlands are a suitable setting to explore this, as the cannabis policy is less strict compared to many other countries, and cannabis policy measures were implemented many years ago. Similarly, Dutch alcohol policy is less strict compared to other countries, but problematic drinking among youngsters is an increasing problem in the

Netherlands. An investigation into opinions on alcohol policy measures across different age groups may therefore be of interest.

In view of these aspects, the research objectives formulated for this study are:

1. To examine the opinion of Norwegian and Dutch adults on alcohol policy measures that may prevent young people from problematic drinking.
2. To investigate whether Norwegian and Dutch parents differ in their perceptions on parental measures, and how parents view governmental responsibility to prevent adolescents from substance use.
3. To explore differences between Norwegian and Dutch adults in their level of acceptance of illicit drug use and to explore influences on the level of acceptance.
4. To assess the opinion of 16-22 year olds on alcohol policy measures compared to the opinion of adults older than 22 years.
5. To examine the opinion of Dutch adults on Dutch cannabis policy measures and to explore whether the popularity of these policy measures depends on the extent to which lay people are affected by these measures.

Study design and questionnaire

Data were collected by a cross-sectional internet survey conducted in November 2008 in Norway and in the Netherlands. In Norway, the data were derived from a subsample of a web panel administered by Synovate. The members of this panel, i.e. active users of internet, are recruited through telephone interviews with respondents in general population surveys who were assumed to be representative for the Norwegian adult population. Initially 5,998 households were selected, and a total of 2,150 respondents were willing to participate in the survey.

In the Netherlands, an existing panel, called the LISS panel (Longitudinal Internet Studies for Social sciences), was used to collect the data. This panel was established by CentERdata. To establish this panel, a simple random sample of 10,150 household addresses was drawn from an address frame of Statistics Netherlands. All members of the households in the sample were asked to participate. In total, 5,000 households with 8,280 panel members were included in the LISS panel. Households that could not otherwise participate were provided with a computer and internet connection. For this study, an online questionnaire was sent to all panel members. Two reminders were sent to the panel members to increase the response rate.

All Norwegian and Dutch panel members received an online questionnaire to examine their opinion on alcohol and drug-related topics. Topics that were assessed were: acceptability, responsibility and parenting, social environment, alcohol and drug policy measures, and social norms. Opinions on these items were measured on a 5 or 7-point Likert scale, ranging from totally disagree (1) to totally agree (5 or 7). Substance use, identifiable characteristics, and political preference were also assessed, as

Chapter 1

were demographic variables including: gender, education level, age, family conditions, year of birth, most important daily activity, number of children in the family, and urban population density. With the exception of 7 items, the questionnaire was identical for both countries; the differences were due to the different drug laws in the two countries. Appendix 1 presents the online questionnaire.

Of the five chapters included in this thesis, two (Chapters 5 and 6) are based on the Dutch sample only, and the remaining three are based on both the Dutch and Norwegian samples (Chapters 2, 3, 4).

Outline of this thesis

Following this introduction, *Chapter 2* examines the support for restrictive alcohol policy measures and educational measures that may prevent young people from problematic drinking among Dutch and Norwegian adults. Dutch and Norwegian adults aged 24 years and older were compared in order to assess differences and to explore whether the differences in alcohol policies in both countries were related to opinions on alcohol policy measures that may prevent young people from drinking.

Chapter 3 addresses the question whether parents feel responsible for taking measures to prevent young people from substance use. Apart from considering the responsibility of parents, also how parental measures that prevent young people from substance use were perceived by Dutch and Norwegian parents was explored. For this investigation, only parents from the overall Dutch and Norwegian sample were included and their perspectives were compared.

Chapter 4 describes to what extent illicit drug use among Norwegian and Dutch persons aged 16 years and older is accepted in their own society. The normalization thesis, developed in the 1990s and used as a framework to determine the normalization of illicit drug use in societies, especially among young people, was used in this study to identify the normalization of illicit drug use within Norwegian and Dutch society.

Chapter 5 presents the results of a study conducted among adults and young people in the Netherlands. This study examines and compares opinions on restrictive alcohol policy measures and educational alcohol policy measures of adults and young people. Age groups were compared as the popularity of restrictive measures may differ between younger people (16-22 years) and older adults (> 22 years). The study also provides an analysis of factors that influence the opinion of young persons in the Netherlands.

Chapter 6 focuses on the opinion of Dutch adults on cannabis policy measures. It explores whether similarities can be found with factors that influence opinions on alcohol policy. The study also investigates opinions on cannabis policy measures among adults in the Netherlands.

In *Chapter 7* the main findings are summarized and discussed. In addition, methodological considerations are addressed, recommendations are made for future research. Finally, implications for policymaking are presented.

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2

Dutch and Norwegian support of alcohol policy measures to prevent young people from problematic drinking

Based on: van der Sar, R, Storvoll, EE, Brouwers, EPM, van de Goor, LAM, Rise, J, Garretsen, HFL. Dutch and Norwegian support of alcohol policy measures to prevent young people from problematic drinking: a cross-national comparison. *Alcohol and Alcoholism* 2012; 47(4), 479-485.

Abstract

Aims: To examine whether Dutch and Norwegian adults differ in their opinion on policy measures that may prevent young people from problematic drinking.

Methods: Data were derived from a web-based cross-sectional study. In this study, only Dutch and Norwegian adults (aged ≥ 24 years) were included ($N_{NL}=5,023$, $N_{NO}=1,916$). Opinion on policy items concerning restrictive and educational measures were examined together with alcohol consumption.

Results: Differences between the opinions of the Dutch and Norwegians concerning the restrictive and educational measures were small. In both countries, support for the restrictive measures was predicted by female gender, higher age and less own alcohol consumption. For the educational measures, the explained variance in the Norwegian and Dutch sample was relatively low; this indicates that opinion was more strongly predicted by other factors.

Conclusions: This study indicates that, despite the differences between the Dutch and Norwegian alcohol policy, differences in opinion are small between Dutch and Norwegian respondents, especially regarding restrictive measures that may prevent young people from drinking.

Introduction

Alcohol policy refers to *'any measures that affect the market in alcohol, the level and patterning of alcohol consumption or the occurrence of alcohol-related problems'* [1, p. 278]. It is a way in which governments try to regulate alcohol consumption to minimize harmful effects of alcohol while respecting individuals' rights [1].

In the last decade, young people's alcohol use has received increasing attention with regard to alcohol policies. The harmful effects of youth drinking are considered worrisome [2-4]. For example, the Netherlands has focused on policy measures to reduce alcohol abuse among young people. The measures to achieve this encompassed stricter regulations regarding the minimum age (16 years for drinking beer/wine, and 18 years for drinking spirits), more focus on the minimum drinking age through educational programs in schools, and increased involvement of parents in interventions [5].

The appreciation of (especially) a restrictive alcohol policy by the general public and its implications is rather low [6]. Controlling measures, such as increasing taxes and reducing outlets/selling hours have generally not been well supported by the general population [7]. Other studies have shown a low level of support for policies that regulate specific types of alcohol sales [8], that increase the price [9], or reduce the availability of alcoholic beverages [10].

Several factors play a role in adult opinions on alcohol policy measures. For instance, own alcohol use influences the amount of public support of restrictive alcohol policy measures [6, 9-15]. Other factors were gender, age [7, 9-12, 14] and educational level [9, 11].

Most studies assessing the support of alcohol policy measures are national ones that focus on alcohol policy measures that prevent the general public from problematic drinking. However, knowledge on the extent to which measures that may prevent young people from problematic drinking are supported by adults is limited but may facilitate implementation of the alcohol policy measures, especially when they aim to prevent young people from problematic drinking. Moreover, conducting a cross-national study to compare opinions on these measures allows to explore possible interactions between opinions and actual policy situations and contexts. Giesbrecht and Greenfield [7] stated that differences in opinion between countries are expected to be greater than differences over time within a specific country. Whereas most comparative studies have been conducted in Canada and the USA, comparisons between other (e.g. European) countries with different traditions concerning alcohol policy are less common.

Norway and the Netherlands are European countries with very different alcohol policies. In a study ranking national alcohol policies from most to less regulated, Norway was ranked first out of 30 countries as being the country with the most regulated alcohol policy. In contrast the Netherlands was ranked 22nd, indicating that the

Dutch national alcohol policy is much less regulated than that of Norway [16]. This difference in regulated alcohol policy is an interesting context to examine whether opinion on alcohol policy measures also differs.

The Norwegian alcohol policy is based on three principles: 1) strict physical availability of alcoholic beverages, 2) high alcohol taxes and prices, and 3) a comprehensive alcohol monopoly system [17]. Taken together, this means that (a) only alcoholic beverages with an alcohol percentage $\leq 4.75\%$ can be sold in licensed grocery stores, that (b) alcoholic beverages with an alcohol percentage $\geq 4.75\%$ (wine and spirits) are sold in state retail monopoly outlets, that (c) the minimum legal age for purchase of alcohol is 18 years for beer and wine, and 20 years for spirits, that (d) alcohol advertising is banned, and that (e) alcohol prices are relatively high [18].

Dutch alcohol policy is much less regulated. Controlling and restrictive measures are not strongly embedded within Dutch alcohol policy, which focuses more on preventing harmful alcohol use and on retrieving harm related to alcohol consumption [19]. Alcohol consumption is seen more as a citizen's responsibility than the government's responsibility [20, 21]. General alcohol policy measures are that: 1) only distilled beverages with a low alcohol content ($<15\%$ alcohol) can be sold in supermarkets, and those with a high level of alcohol ($>15\%$ alcohol) in off-licensed premises, that 2) the minimum drinking age for buying distilled beverages with a low alcohol content is 16 years, and for distilled beverages with a high alcohol content is 18 years, that 3) alcohol advertising on radio and television is prohibited between 6 am and 9 pm, and that 4) tax rates are included in the price of alcoholic beverages and are different for beer, wine and distilled drinks [22].

Differences in alcohol policy may indicate that opinions on alcohol policy measures that may prevent young people from problematic drinking may also differ. Therefore, in the present study Norwegian and Dutch adults were asked for their opinion on alcohol policy measures that may prevent young people from problematic drinking. The specific research questions are: 1) Do Norwegian and Dutch adults differ in their opinion on alcohol policy measures targeted at preventing young people from problematic drinking? 2) What factors predict the opinions of Norwegian and Dutch adults and is this predicted by other or similar factors? The restrictive and educational measures were studied separately.

Methods

Total sample

Data were gathered from a cross-sectional web-based study that examined the perceptions on alcohol and drug policy, and alcohol and drug use in November 2008. This broader study was conducted in Norway and the Netherlands.

In Norway, data for this broader study were derived from a subsample of a web panel administered by Synovate comprising approximately 60,000 persons. The members of this panel were active users of the internet and were recruited through telephone interviews. Initially 5,998 persons were selected; finally 2,150 respondents participated in the study. The non-response of the Norwegian sample was 64%.

In the Netherlands, data were derived from a subsample of an already existing panel that was used to collect the data (Longitudinal Internet Studies for Social sciences, LISS) administered by CentERdata. This was a representative panel of the Dutch population that receives online questionnaires monthly. In total, 5,000 households with 8,280 panel members were included in the LISS panel. Panel members who complete online questionnaires receive a monthly incentive. Two reminders were sent to increase response rate. A total of 5,616 respondents were included; the non-response rate was 32.8%.

Sample for analysis

For the present study respondents aged ≥ 24 years were selected from the Dutch and Norwegian sample ($N_{NL}=5,023$, $N_{NO}=1,916$). Younger people were excluded in order to avoid that respondents had to judge policy measures targeting their own age group. Compared to the overall Dutch and Norwegian population, there were included somewhat more females and more respondents in the age groups from 45-64 in both the Dutch and Norwegian sample [23, 24a, 24b]. Moreover those who participated in the survey were higher educated compared to the general population, especially in Norway [23].

Measures

The extent of support for various alcohol policy measures was examined on a five-point Likert scale ranging from 'totally disagree' (1) to 'totally agree' (5). Table 1 presents the policy measures examined in the present study, and whether or not they were already introduced in Norway and the Netherlands at the time of this study.

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Table 1: Items categorized into alcohol policy measures corresponding with factorial components, and whether these measures are implemented in the Netherlands (NL) and in Norway (NO)

alcohol policy measures		implemented?		corresponding items
		NL	NO	
Restrictive measures	price policy ¹	yes ¹	yes ²	The price of alcohol should be raised ¹
	prohibition of alcohol advertising ²	partly ³	yes	Alcohol advertising should be banned
	prohibition of happy hours in bars and discos	no	yes	Happy hours in bars and discos should be prohibited
	prohibition of the sale of alcopops in supermarkets	no	no ⁴	Supermarkets should not sell alcopops like Breezers
	prohibition of the sale of alcoholic beverages in supermarkets	no	no	Supermarkets should not sell any alcoholic beverages at all
	prohibition of the sale of alcoholic beverages where youth under 16 years come together	no	no	Alcohol should not be sold at places where youth under 16 years come together, e.g. sport canteens
	prohibition of alcohol use	no	no	Alcohol use should be prohibited
Educational measures	education campaigns	yes	yes	The government should conduct alcohol education campaigns
	school education campaigns	yes	yes	The government should ensure that schools provide alcohol education

¹ Dutch alcohol prices are about average for Europe [22]

² When adjusted for the countries' standard of living, the alcohol prices are higher in Norway than in the Netherlands [16]

³ There is a ban on alcohol advertising between 6.00 and 21.00 h on television and radio

⁴ The supermarkets sell beer and alcopops whose alcoholic content does not exceed 4.7% by volume, but not wine and spirits

Alcohol use was measured using the Quantity Frequency method (QF) [25, 26]. Alcohol consumption during the previous 30 days was examined. Respondents were asked on how many weekdays (Monday through Thursday) and weekend days (Friday through Sunday) they on average drank alcoholic beverages, and how many units they on average drank on week days and weekend days. Respondents were classified as 'never users' if they had never drunk any alcohol. Weekly alcohol use was assessed by multiplying the number of drinking week days by the number of glasses in a week day, and for weekend days by multiplying the number of drinking weekend days by the number

of glasses on a weekend day. They were classified in categories according to the number of alcoholic units drunk during one week [27]. Light drinking refers to 1-5 drinks a week, moderate drinking to 6-20 drinks a week, and >20 drinks a week indicates heavy drinking. However, the amount of grams of a standard alcohol unit is not the same in the Netherlands and Norway. In the Netherlands a standard alcohol unit contains approximately 10 grams of alcohol while in Norway a standard unit contains on average 12-15 grams [28, 29].

Demographic variables as age, gender, education level, and urbanization rate were selected from the overall panel data. As the categories of education level and urbanization rate were examined differently in the two countries, these variables were converted to similar categories. Regarding education level, 'high educated' refers to university and bachelor degree, 'middle educated' to secondary vocational education and pre-university education, and 'low educated' refers to primary compulsory education. Table 2 presents some characteristics of the study sample.

Statistical analyses

To examine whether there is an association between the various alcohol policy measures, Principal Component Analysis (PCA) was conducted. The components indicated by PCA correspond with the classification in Table 1. The components were used to define sum scores on restrictive measures and educational measures.

To analyze differences between Dutch and Norwegian respondents on each alcohol policy measure, t-tests were used. Effect sizes were calculated to interpret the magnitude of the differences between the Norwegian and Dutch respondents. In accordance with Cohen (1988), an effect size of 0.01 was classified as a small effect, 0.06 as a moderate effect, and 0.14 as a large effect.

In addition to t-tests, regression analyses on item level were conducted to control for the demographic differences in the two samples. First, regression analyses that included only country as independent variable were conducted. Second, regression analyses that included gender, age, education level and urbanization rate in addition to country were conducted. Whether the effects of a country changed when taking into account the different compositions of the samples, was examined by comparing the unstandardized Beta (B), standard error (SE B) and t-value. Dummy coding was applied to gender (men=1), education level and urbanization rate. Respondents belonging to a particular category were assigned code 1; all other respondents were coded as 0. The categories, low education and living in a rural area served as reference groups.

To identify factors predicting the support on alcohol policy measures, standard multiple regression analyses ($p < 0.01$) on the sum scores of the restrictive and educational measures were conducted by country. The sum scores of the educational measures and the restrictive availability measures were the dependent variables. Age, alcohol consumption, gender, urbanization rate and education level served as inde-

pendent variables. Dummy coding was applied to alcohol consumption, gender (men=1), education level and urbanization rate. The categories ‘never users’, ‘low education’, and ‘living in a rural area’ served as reference groups. Subsequently, to test whether the effects of the independent variables on the support varied between Norway and the Netherlands, a t-test was developed to test for differences in un-standardized regression coefficients in two independent samples¹ [30, 31].

Results

Demographics and drinking pattern

Table 2 presents data on demographics. The Dutch respondents were older, were more often women, more often lived in cities and were less highly educated compared with the Norwegian respondents. Regarding alcohol consumption, there were more heavy drinkers in the Dutch sample and more light drinkers in the Norwegian sample (Table 3).

Table 2: Demographic variables of the respondents (%) from the Netherlands and Norway

		Netherlands (N=5023)	Norway (N=1916)
Mean age (SD)		49.95 (14.0)	46.6 (13.4)
		%	%
Age	24 –34	15.9 (n=799)	22.3 (n=428)*
	35 –44	21.8 (n=1094)	24.6 (n=472)*
	45 –54	23.2 (n=1164)	22.2 (n=425)
	55 –64	22.9 (n=1150)	19.8 (n=379)*
	>65	16.2 (n=816)	11.1 (n=212)*
Gender	Men	45.9 (n=2305)	51.6 (n=988)*
	Women	54.1 (n=2718)	48.4 (n=928)*
Urbanization	Rural area	15.4 (n=773)	15.7 (n=301)
	Urban area	22.3 (n=1122)	26.1 (n=501)*
	Town area	22.9 (n=1150)	24.7 (n=473)
	Metropolitan area	39.4 (n=1978)	33.5 (n=641)*

¹ $t = \frac{b_i - b_j}{\sqrt{SE_{b_i}^2 - SE_{b_j}^2}}$

Dutch and Norwegian support of alcohol policy measures

		Netherlands (N=5023)	Norway (N=1916)
Level of education	Low	35.6 (n=1786)	8.7 (n=167)*
	Middle	31.8 (n=1598)	33.5 (n=642)
	High	32.6 (n=1639)	57.8 (n=1107)*

* significant at $p < 0.01$ (Chi square)

Table 3: Alcohol consumption among respondents (%)

	Netherlands (N=5023)	Norway (N=1916)
Never drinking (never used alcohol)	5.4 (n=267)	5.9 (n=112)
Non regular drinking (not drink regularly)	17.5 (n=866)	13.3 (n=251)*
Light drinking (1–5 drinks a week)	30.9 (n=1525)	40.8 (n=769)*
Moderate drinking (6–20 drinks a week)	35.5 (n=1754)	36.3 (n=685)
Heavy drinking (>20 drinks a week)	10.6 (n=524)	3.7 (n=70)*

* significant at $p < 0.01$ (Chi square)

Opinion on restrictive and educational alcohol policy measures

Table 4 presents data on the opinions of the Norwegian and Dutch respondents. Although significant differences were found, the effect sizes for restrictive measures were in general small to moderate. The largest differences were found for the items 'not selling alcopops in supermarkets' and 'not selling any alcoholic beverages in supermarkets' of which the effect sizes were larger. More Dutch agreed on this than Norwegians. The educational measures were supported by both the Norwegian and Dutch respondents. Multiple regression analyses on item level showed that the pattern of country differences persisted (Table 4) when controlling for gender, age, education level and urbanization rate.

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Table 4: Opinion on alcohol policy measures among Dutch (NL) and Norwegian (NO) respondents (1 totally disagree - 5 totally agree)

	NL (M)	NO (M)	Effect size
<i>Restrictive measures</i>			
The price of alcohol should be raised	2.61 (± 1.08) (n=4997)	2.38(± 1.09)* (n=1911)	.009
Alcohol advertisements should be banned	3.14 (± 1.15) (n=5000)	3.69 (± 1.27)* (n=1910)	.038
Happy hours in bars and discos should be banned	3.30 (± 1.15) (n=4991)	2.83 (± 1.20)* (n=1903)	.003
Supermarkets should not sell alcopops such as Breezers	3.38 (± 1.18) (n=5002)	2.42 (± 1.24)* (n=1904)	.114
Supermarkets should not sell any alcohol at all	2.78 (± 1.17) (n=4986)	1.92 (± 1.04)* (n=1895)	.114
Alcohol should not be sold at locations frequented by people younger than 16 years, e.g. sport club canteens	3.43 (± 1.19) (n=4995)	3.62 (± 1.25)* (n=1909)	.005
Alcohol use should be prohibited	2.00 (± 0.80) (n=4993)	1.55 (± 0.79)* (n=1910)	.060
<i>Educational measures</i>			
The government should conduct alcohol education campaigns	4.07 ($\pm .76$) (n=4999)	4.33 ($\pm .76$)* (n=1909)	.022
The government should ensure that schools provide alcohol education	4.20 ($\pm .70$) (n=4996)	4.40 ($\pm .70$)* (n=1905)	.016

* significant at $p < 0.01$ (t-test)

Predictors of the opinion on restrictive policy measures

Table 5 presents data on the multiple regression analyses. The variables considered in the present study explained 21% of the variance of the opinion of the Dutch on restrictive measures, compared with 23% of the variance of the opinion of the Norwegians. Regarding the standardized coefficients, the support of the restrictive measures was explained by the same factors in both Norway and the Netherlands. Respondents who drank moderately had the most negative opinion about the restrictive measures. Younger respondents and men were also more negative about these measures than older respondents and women. Thus, in both countries, gender had only a minor but significant influence. Urbanization and education level were not significant predictors in either country. According to the method of Paternoster [30], no significant differences were found between Norwegian and Dutch respondents in the strengths of the

considered predictors. This implies that this model did not differ between Norwegian and Dutch respondents.

Predictors of the opinion on educational policy measures

The models were significant for both countries, but explained only 2.6% and 1.3% of the variance in the Dutch and Norwegian sample, respectively (Table 5). In the Dutch sample, heavy drinking had a negative effect on the support of educational measures. Respondents who drank moderately were less negative compared with heavier drinkers. Men, younger respondents and respondents with middle and higher education agreed less with the educational measures compared with women, older respondents and respondents with a lower education. Urbanization rate, light drinking and irregular drinking did not predict the opinion. The Norwegian model showed a significant influence of irregular drinkers on the educational measures only; these respondents were more positive about these measures than respondents that did not drink regularly. Of the predictors under study, significant differences were found between Norwegian and Dutch respondents on age and moderate drinking. This implies that these predictors were stronger among the Dutch than among Norwegian respondents. For the other predictors the model showed no differences between Dutch and Norwegian respondents.

Table 5: Multiple linear regression models predicting support on sum scores for restrictive and educational measures (1 totally disagree - 5 totally agree)

		Netherlands (NL)				Norway (NO)			
Opinion on		B	SE	β	p	B	SE	β	p
restrictive	Independent variables								
measures ^a	(Constant)	19.242	.469	-	.000*	19.709	.852	-	.000*
n=1979 (NE) n=829 (NO)	Age ¹	.131	.006	.321	.000*	.101	.009	.236	.000*
	Gender ²	-.697	.153	-.061	.000*	-.911	.237	-.079	.000*
	Urbanization rate ³								
	Metropolitan area	.196	.218	.017	.369	-.744	.365	-.061	.042
	Town area	.201	.239	.015	.400	-.044	.379	-.003	.908
	Urban area	.308	.240	.023	.199	-.547	.373	-.042	.142
	Education level ⁴								
	Middle educated	-.038	.186	-.003	.840	-.775	.453	-.064	.088
	High educated	-.058	.185	.005	.753	-.625	.442	.054	.157
	Alcohol use per week ⁵								
	Not drink regularly	-2.973	.357	-.198	.000*	-2.574	.577	-.152	.000*
	1–5 drinks	-4.592	.340	-.372	.000*	-4.785	.513	-.408	.000*
	6–20 drinks	-6.346	.339	-.532	.000*	-7.396	.520	-.617	.000*
	>20 drinks	-8.239	.393	-.445	.000*	-8.803	.776	-.289	.000*

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		Netherlands (NL)				Norway (NO)			
Opinion on		B	SE	β	p	B	SE	β	p
educational measures ^b	(Constant)	8.059	.121	-	.000*	8.625	.234	-	.000*
	Age ¹	.006	.001	.068	.000*	.002	.002	.016	.659
	Gender ²	-.274	.039	-.103	.000*	-.153	.065	-.055	.019
n=1978 (NL)	Urbanization rate ³								
n=842 (NO)	Metropolitan area	.136	.056	.050	.015	-.032	.100	-.011	.750
	Town area	.124	.061	.039	.044	.036	.104	.011	.750
	Urban area	.078	.062	.025	.205	.012	.102	.004	.910
	Education level ⁴								
	Middle educated	.132	.48	-.046	.006*	-.082	.125	-.028	-.658
	High educated	.216	.48	-.076	.000*	-.143	.121	-.051	.240
	Alcohol use per week ⁵								
	Not drink regularly	-.131	.092	-.038	.153	.476	.158	.116	.003*
	1–5 drinks	-.154	.087	-.054	.078	.191	.141	.068	.174
	6–20 drinks		.087	-.093	.003*	.141	.143	.049	.322
	>20 drinks	-.458	.101	-.107	.000*	.022	.213	.003	.104

* significant with $p > 0.01$

^a NE: $R = .457$, $R^2 = .208$, Adjusted $R^2 = .207$, $F(11, 4924) = 117.899$, $p = .000$

NO: $R = .487$, $R^2 = .237$, Adjusted $R^2 = .233$, $F(11, 1872) = 52.988$, $p = .000$

^b NE: $R = .161$, $R^2 = .026$, Adjusted $R^2 = .024$, $F(11, 4924) = 11.950$, $p = .000$

NO: $R = .115$, $R^2 = .013$, Adjusted $R^2 = .008$, $F(11, 1872) = 2.301$, $p = .009$

¹ Age: continuous variable

² Gender: 0=women, 1=men

³ Urbanization rate: 0=no; 1=metropolitan area, town area, urban area

⁴ Education level: 0=no; 1=middle educated level, high educated level

⁵ Alcohol use per week: 0=no, 1=does not drink regularly, 1–5 drinks, 6–20 drinks, > 20 drinks

Discussion

The aim of this study was to examine differences in the opinions of Norwegian and Dutch adults on alcohol policy measures that may prevent young people from problematic drinking. The largest differences were found for not selling alcopops in supermarkets and not selling any alcoholic beverages in supermarkets with which more Dutch agreed than Norwegians. Other significant differences between the Dutch and Norwegians on the restrictive and educational measures were small. Nevertheless, differences on these measures were found between the countries even after controlling for gender, age, education level and urbanization rate. However, the possibility cannot be ruled out that the samples also differed along other variables that are important for the extent of support. The opinion on the restrictive measures was predicted by the same characteristics in both countries, e.g. gender, age and alcohol use. The relatively high proportions of the explained variance of both models imply that these important predictors of the support for these policy measures. For the

educational measures, it seems that the support is more strongly predicted by other factors.

Own drinking has still a strong effect on opinion as has been reported earlier [6, 9-15]. Moreover, older people and women are reported to be more positive about restrictive measures [7, 9, 11, 12, 14, 15]. This effect was also shown in the Dutch and Norwegian samples. Only education level had a different effect in Norway and the Netherlands. However, in contrast to Bongers et al. [11] who reported that highly educated respondents were less supportive of restrictive measures, the present study shows that education level did not influence the opinion on restrictive measures in either country.

Although Norway and the Netherlands have very different traditions in alcohol policy, differences in their support of the alcohol policy measures were small. The higher scores of the Dutch respondents regarding the sale of alcopops in supermarkets and a ban on the sale of alcohol in supermarkets may be explained (in part) by the fact that restrictive and controlled measures are already an important part of Norwegian alcohol policy whereas in the Netherlands they are not (Table 1). Therefore, Norwegians may be less positive about restrictive measures than the Dutch respondents. A recent Norwegian study also reported that most Norwegian adults think that alcohol is too expensive and that wine (but not spirit) should be sold in their grocery stores [32]. Another possible explanation for the higher Dutch scores may be the increasing media focus on the harmful effects of problematic drinking among young people, which may have increased general public awareness in the Netherlands. This may have resulted in a more positive opinion on measures that prevent young people from drinking.

Moreover, neither the Dutch nor the Norwegian respondents were completely negative about these restrictive measures, even when these measures also affected themselves. Based on the higher scores of the Dutch respondents in particular, this may imply that they are willing to accept restrictive alcohol policy measures to prevent young people from alcohol abuse. Particularly when some support for these restrictive measures has been found, policymakers can use these findings as a tool to bridge the gap in public understanding towards new alcohol policies [33]. Monitoring the dynamics of the opinion within a country would therefore be helpful to get more understanding how this may change over time and can be of value for further national alcohol policy development.

In relation to European alcohol policy development, the findings may be a starting point for a further discussion about European alcohol policy development. Norway and the Netherlands differ in their strictness of the national alcohol policies but there seems not to be a strong relationship between that and how Dutch and Norwegian citizens think about alcohol policy measures and alcohol prevention. This assumes that citizens across country borders may not think very differently about European alcohol policy measures. Further research to explore this more in depth is therefore needed.

Although this study has a large sample size and cross-national data, some limitations need to be addressed. First, the results can probably not be generalized to the Dutch and Norwegian populations because, especially in the Norwegian sample, highly educated people were overrepresented; this is reported to be a disadvantage of web-based research [34-36]. However, by controlling for gender, age, education level and urbanization rate, differences in opinion on all alcohol policy measures between Dutch and Norwegian respondents still occurred. Second, because the study is cross-sectional, no causal inferences can be drawn. However, cross-national studies do allow to make comparisons across countries which is, according to Giesbrecht [7], of even more value because differences are expected to be greater than comparisons over time within the same country. Third, compared with the Dutch response rate, that of the Norwegians was relatively low; this is likely due to differences in the selection procedure. For example, in the Netherlands the respondents were already taking part in an existing panel providing participants with facilities and incentives, whereas in Norway there were no incentives and it was much easier for people to decline. Another limitation was that alcohol consumption was based on self-report only, which might lead to some bias [10, 37]. Finally, because the proportion of the explained variance of the educational models was relatively low, the results with regard to the educational measures should be interpreted with some caution.

In this study there were no substantial differences in the opinions on policy measures between the Dutch and Norwegian respondents; also, there were no substantial differences in the predictors of support. Although Norway and the Netherlands have different alcohol policies, differences in opinion on alcohol policy measures that may prevent young people from problematic drinking were small.

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3

A comparison of Dutch and Norwegian parents on perceptions on parental measures to prevent substance use among adolescents

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Abstract

Aims: This study investigated whether Dutch and Norwegian parents differ in their perceptions on parental measures and how parents view governmental responsibility to prevent adolescents from substance use.

Methods: Data derived from a cross-sectional internet survey conducted in the Netherlands and Norway. A subsample of Dutch (N=2,017) and Norwegian parents (N=844) was selected. T-test and multiple regression analyses were used for analyzing and exploring parental perceptions.

Results: Importance of parental responsibility was emphasized by both Dutch and Norwegian parents. Compared to Dutch parents, Norwegian parents were slightly more positive on taking parental measures. Dutch frequent and heavy drinkers, and Norwegian men were most negative on parental perceptions on alcohol measures. Regarding the perceptions on drug parental measures, Dutch and Norwegian lifetime cannabis users and current cannabis users did support parental measures to a lower extent.

Conclusions: Results suggest that both Dutch and Norwegian parents feel responsible to provide measures to prevent children from alcohol and drug use regardless of the alcohol and drug policy in both countries. Dutch and Norwegian parents supported parental measures to prevent adolescents from substance use.

Introduction

Parents seem to play an important role in the prevention of substance use targeting adolescents. Research shows that a number of family-related factors, as family involvement, family relations, family cohesion, family communication, family management and attitudes, parental modeling, and parental influence are related to later alcohol and substance use among youth [1, 2]. In particular parental influence plays a key role in young people's substance use [2]. Several intervention studies targeting parents as part of the intervention have been conducted to prevent young people from alcohol abuse [3-6], to prevent drug abuse [7], and to prevent both alcohol and drug use among teenagers and adolescents [8-11].

As part of this development, alcohol-specific socialization has received a lot of attention in recent years. It refers to practices parents initiate to prevent their children's drinking behavior [12-14]. The most effective manner of alcohol-specific socialization seems to be the provision of alcohol-specific rules [12, 13, 15] in order to postpone the age of onset of alcohol consumption of younger and older adolescents [16]. In relation to drug use, parental supervision and confidence in parents and grandparents have been found to be associated with a reduced rate of drug use [17]. Also communication patterns between parent and their children, may protect youth from involvement with alcohol, tobacco, or other drugs [18].

The results of these studies clarify the important role of parental influence on the development of substance use patterns among their children. However, not much research has been done yet on perceptions of parents on parental measures preventing adolescents from substance use. Van Hoof, Gosselt & De Jong [19] investigated parental support for governmental alcohol control policies. They found strong support for alcohol control policies, especially for not drinking under the Dutch normative drinking age of 16 years. In relation to drug use among adolescents, studies on perceptions of parents on parental measures related to cannabis or other drugs are scarce.

Cross-national comparative studies on how parents view parental measures have not much been conducted either. Comparing parents from different countries that have different national alcohol and drug policies are of interest as the different policies may also influence parents' perceptions on parental measures that may prevent young people from substance use. Norway and the Netherlands are countries with different national alcohol and drug policies. Whereas in the Netherlands alcohol is easily available and relatively inexpensive, in Norway sale and distribution of alcoholic beverages is much more regulated and expensive. In relation to drug policies, the two countries also have different drug policies. In the Netherlands, the sale of cannabis through so-called coffee shops is tolerated under strict conditions. Apart from having less than 5 gram cannabis for personal use, possession, dealing and production of drugs is prohibited. In Norway, possession, dealing, using and any other way of illegal handling is a criminal offence.

These differences may also influence how Dutch and Norwegian parents view their responsibility towards adolescents' substance use and what their perceptions are on parental measures to prevent adolescents from substance use. However, it is unknown if the national alcohol and drug policies in Netherlands and Norway may lead to different views on parental responsibility and to different perceptions on taking parental measures to prevent adolescents from substance use.

In sum, three research questions are investigated: 1) How do Dutch and Norwegian parents view their responsibility on taking parental measures to prevent adolescents from substance use? 2) Do Dutch and Norwegian parents have different perceptions on parental measures to prevent adolescents from using alcohol, cannabis, cocaine, heroin or drugs in general? 3) What predicts the parental perceptions in the Netherlands and Norway?

Methods

Panel and participants

The study was part of a cross-sectional internet survey that examined the opinion on substance use and related policy measures in the Netherlands and Norway. In Norway, data were derived from a subsample of a web-panel administered by Synovate. The members of this panel were active users of internet and were recruited through telephone interviews. Initially 5,998 persons were selected. Altogether 2,150 respondents participated in the survey. The non-response rate of the Norwegian sample was 64%.

In the Netherlands, a Dutch already existing panel was used to collect the data (Longitudinal Internet Studies for Social sciences, LISS) administered by CentERdata. This was a representative panel of the Dutch population that received online questionnaires monthly. 5,000 households with 8,280 panel members were included in the LISS panel. Panel members who completed online questionnaires received a monthly incentive. Two reminders were sent to increase response rate. Altogether, 5,616 respondents were included in the sample. The non-response was 32.8%.

For this study, only parents were selected from these samples. In the Dutch sample parents were defined as respondents with children living at home. In the Norwegian sample parents were defined as respondents with children <18 years living at home. In total, 844 Norwegian parents and 2,017 Dutch parents participated in this study.

Measures

Responsibility to take measures to prevent adolescents from substance use and perceptions on parental measures were measured on a five-point Likert scale with response categories ranging from 'totally disagree' (1) to 'totally agree' (5). Concerning responsibility to take parental measures four items were included. These are presented in Table 2. Parents' perceptions were examined by asking their opinion on different parental measures regarding alcohol and drug use (Table 3). In addition, parental allowance regarding alcohol, cannabis and other drugs use was also examined (Table 4). On all items related to cannabis or other drugs, the child's age was replaced by 18 years.

Alcohol use was measured using five questions according to the Quantity Frequency method (QF) [20, 21]. Parents were asked on how many weekdays (Monday through Thursday) and weekend days (Friday through Sunday) they on average drank alcoholic beverages and how many alcoholic beverages they drank on average on these days during last 30 days. Parents were classified in categories according to the alcoholic units drunk within one week [22]. Drinking <1 drink a week was defined as non-frequent drinking, between 1-5 drinks a week as light drinking, between 6-20 drinks as moderate drinking and > 20 drinks as heavy drinking. Parents were classified as 'never users' if they had never drunk alcohol.

Drug use was measured by asking parents' current and lifetime cannabis, ecstasy, cocaine and heroin use.

Demographic variables were not included in the questionnaire as this information was selected from the overall panel data. Background variables like gender, age, country, children living at home, education level and urbanization rate are shown in Table 1.

Statistical analysis

First, Chi-square tests were conducted to calculate differences in proportion sizes between substance use (alcohol, cannabis, ecstasy, cocaine, heroin). Second, t-tests were used to explore the differences in parental perceptions between Dutch and Norwegian parents. Effect sizes were calculated to interpret the magnitude of the differences between the Dutch and Norwegian parents. According to Cohen (1988), an effect size for independent sample t-test of 0.01 are classified as 0.01 (small effect), 0.06 (moderate effect), 0.14 (large effect). Third, multiple regression analyses were conducted to predict the perceptions on parental alcohol measures and parental drug measures. To determine overall perceptions two sum scores were constructed (parental alcohol measures and parental drug measures, see items Table 3 and 4) and used as dependent variables within the regression analyses. Only parents with two or less missings on all these items were included in the sum scores. Items regarding allowance on alcohol and drug use (see Table 4) were positively recoded. With dummy coding

independent categorical variables like alcohol and drug use, urbanization rate and education level and gender (men=1) were converted. Respondents within a particular category were assigned with code 1. Parental alcohol use was included in the regression analysis predicting the alcohol related measures and parental drug use was included in the regression analysis predicting the drug related measures. Never users, being a student and living in a rural area were defined as reference groups in the regression analysis.

Results

Sample description

Table 1 presents the demographic variables of the samples and substance use among parents. The average age of the Dutch and Norwegian parents was comparable. The Dutch sample included more mothers than fathers while in the Norwegian sample the percentage of mothers and fathers was rather similar. Regarding education level, the Norwegian sample included more high educated respondents. Lifetime cannabis use was significantly higher among Dutch parents while non cannabis use and non ecstasy use was significantly higher among Norwegian respondents. Concerning alcohol consumption, more heavy drinkers and non regular drinkers were included in the Dutch sample and these groups were significantly larger compared to the Norwegian sample. The group of light drinkers was significantly larger among the Norwegian parents.

Table 1: Demographic variables and substance use of parents (%) according to country

		Netherlands (NE) (N=2017) %	Norway (NO) (N=844) %
Mean age (SD)		43.9 (8.73)	42.0 (8.38)
Age in categories	15 – 24 y	.3 (n=6)	2.4 (n=20)
	25 – 34 y	14.8 (n=298)	15.5 (n=131)
	35 – 44 y	38.1 (n=768)	43.9 (n=371)
	45 – 54 y	34.9 (n=704)	32.7 (n=276)
	55 – 64 y	11.0 (n=222)	4.9 (n=41)
	>65 y	.9 (n=19)	.6 (n=5)
Gender	Men	42.4 (n=856)	48.9 (n=413)
	Women	57.6 (n=1161)	51.1 (n=431)
Children living at home	1	31.5 (n=635)	38.7 (n=327)
	2	49.1 (n=991)	42.4 (n=358)
	3	15.9 (n=321)	15.9 (n=134)
	4	2.4 (n=49)	2.1 (n=18)

Parental perceptions on parental measures to prevent substance use

		Netherlands (NE) (N=2017) %	Norway (NO) (N=844) %
Level of education	>4	1.0 (n=21)	.8 (n=7)
	Low educated	26.1 (n=526)	4.8 (n=40)
	Middle educated	39.1 (n=788)	37.8 (n=319)
	High educated	34.3 (n=692)	54.0 (n=456)
Urbanization rate	Students	.5 (n=11)	3.4 (n=29)
	Metropolitan area	26.1 (n=707)	27.6 (n=233)
	Town area	39.1 (n=495)	26.9 (n=227)
	Urban area	34.3 (n=472)	27.3 (n=230)
Illicit drug use	Rural area	.5 (n=343)	18.2 (n=154)
	<i>Cannabis</i>		
	Current use	1.1 (n=22)	1.1 (n=9)
	Lifetime use	22.1 (n=440)*	16.7 (n=141)
	Non use ⁼	76.7 (n=1525)*	82.2 (n=694)
	<i>Ecstasy</i>		
	Current use	.1 (n=1)	-
	Lifetime use	3.8 (n=76)	2.1 (n=18)
	Non use ⁼	96.1 (n=1913)*	97.9 (n=826)
	<i>Cocaine</i>		
	Current use	.1 (n=1)	-
	Lifetime use	3.0 (n=60)	3.4 (n=29)
	Non use ⁼	96.9 (n=1930)	96.6 (n=815)
	<i>Heroin</i>		
	Current use	-	-
	Lifetime use	.6 (n=11)	.8 (n=7)
	Non use ⁺	99.4 (n=1976)	99.2 (n=837)
Alcohol	Never drinking (never used alcohol)	5.9 (n=117)	5.5 (n=46)
consumption	Non regular drinking(not drink regularly)	20.6 (n=407)*	14.1 (n=117)
	Frequent drinking (< 1 drink a week)	.4 (n=8)	.1 (n=1)
	Light drinking (1-5 drinks a week)	34.7 (n=688)*	44.7 (n=371)
	Moderate drinking (6-20 drinks a week)	31.3 (n=620)	33.6 (n=279)
	Heavy drinking (>20 drinks a week)	7.1 (n=140)*	1.9 (n=16)

* For differences in substance use: significant at $p < 0.01$ (Chi-square)

⁺ Non-use: never used cannabis, ecstasy, cocaine or heroin

Responsibility towards taking measures

Dutch and Norwegian parents highly agreed that mainly parents were responsible for taking preventive measures to prevent young people from drinking alcohol and using drugs (Table 2). They both scored more neutral on the fact that the government is responsible for taking measures. Dutch and Norwegian parents agreed more on gov-

ernmental responsibility towards drug use than towards alcohol use. Dutch and Norwegian parents differed significantly in their perceptions to take responsibility to prevent their children from alcohol use. According the responsibility of the government, Dutch and Norwegian parents differed only on measures towards alcohol use. The differences and effect sizes were small.

Table 2: Parental perceptions on responsibility for alcohol use (A) among adolescents and for drug use (D) among adolescents (1 totally disagree - 5 totally agree)

	Sort of substance use	NE (M)	NO (M)	Effect size
Mainly parents are responsible to take measures against their children's..	A	4.25 (\pm .73) n=2014	4.39 (\pm .70)* n=844	.009
	D	4.23 (\pm .79) n=2010	4.22 (\pm .86) n=844	.000
Mainly the government is responsible to take measures against youngsters regarding.	A	3.23 (\pm .95) n=2013	3.07 (\pm 1.00)* n=844	.006
	D	3.50 (\pm .98) n=2011	3.58 (\pm 1.06) n=842	.001

* significant at $p < 0.01$ (t-test)

Parental perceptions on parental measures

Table 3 shows the perceptions of the Dutch and Norwegian parents on parental measures. Both groups highly agreed that parents should set the right example, set clear rules on underage substance use, educate their children about substance use, discuss views on alcohol and drug use, and should not serve alcoholic drinks to teenagers below 16 years. Except from educating children about alcohol and drug use and not being tipsy in presence of children, the Norwegian parents agreed slightly but significantly more with all items compared to Dutch parents. However, effect sizes were small to moderate.

Table 3: Parental perceptions on parental measures for alcohol use (A) among young people and for drug use (D) among young people (1 totally disagree - 5 totally agree)

	Sort of substance use	NE (M)	NO (M)	Effect size
Parents should set their children the right example concerning..	A	4.46 (\pm .66) n=2013	4.63 (\pm .59)* n=844	.015
	D	4.57 (\pm .68) n=2009	4.71 (\pm .69)* n=842	.001
Parents should educate their children about..	A	4.58 (\pm .56) n=2010	4.41 (\pm .80)* n=839	.01

Parental perceptions on parental measures to prevent substance use

	Sort of substance use	NE (M)	NO (M)	Effect size
	D	4.60 (\pm .57) n=2013	4.18 (\pm 1.2)* n=841	.03
Parents should set clear rules to their children younger than 16/18 ¹ years with respect to..	A	4.51 (\pm .61) n=2001	4.72 (\pm .55)* n=833	.027
	D	4.56 (\pm .63) n=2000	4.87 (\pm .43)* n=842	.076
Parents should discuss with their children younger than 16/18 ¹ years regarding..	A	4.20 (\pm .76) n=2010	4.55 (\pm .68)* n=842	.044
	D	4.24 (\pm .82)* n=2004	4.65 (\pm .73)* n=843	.048
A parent should not serve alcoholic drinks to a teenagers below 16 years of age	A	4.25 (\pm .87) n=2011	4.59 (\pm .77)* n=844	.037
Parents should not be tipsy when children below 16 years are around	A	4.13 (\pm .95) n=2009	3.89 (\pm 1.08)* n=841	.038

* significant at $p < 0.01$ (t-test)

¹ 16 years refer to alcohol use and 18 years to drug use

Dutch and Norwegian parents both disagreed on giving permission for substance use of their children at home under parental supervision and on children's autonomy to decide themselves whether to use substances or not (Table 4). However, Norwegian parents disagreed significantly more on these items. Effect sizes were highest on measures related to cannabis use.

Table 4: Parental perceptions on parental measures regarding allowance on alcohol use (A), cannabis use (C) and other drugs use (O) among their children (1 totally disagree - 5 totally agree)

	Sort of substance use	NE (M)	NO (M)	Effect size
Parents should allow their children younger than 16/18 ¹	A	2.11 (\pm 1.07) n=2009	1.51 (\pm .89)* n=839	.078
years to use at home under parental supervision	C	1.60 (\pm .83) n=2003	1.11 (\pm .51)* n=842	.115
	O	1.41 (\pm .69) n=1998	1.09 (\pm .48)* n=836	.067
Parents should let their children younger than 16/18 ¹ years decide for themselves whether or not to use...	A	1.62 (\pm .79) n=2011	1.42 (\pm .87)* n=841	.012
	C	1.66 (\pm .88)* n=2003	1.18 (\pm .66)* n=842	.008
	O	1.46 (\pm .72) n=2005	1.12 (\pm .54)* n=843	.064

* significant at $p < 0.01$ (t-test)

¹ 16 years refer to alcohol use and 18 years to drug use

Predictors of perceptions on parental alcohol measures

Table 5 shows the outcomes of the regression analysis predicting the parental perceptions on parental alcohol and parental drug measures in the Netherlands and Norway. The model predicting perception on parental alcohol measures explained almost 10% of the variance among Dutch parents and almost 8% among the Norwegian parents. Among the Norwegian parents gender was the strongest predictor and negatively associated with the perception of parental alcohol measures meaning that mothers were stricter in their perceptions on parental alcohol measures than fathers. Among Dutch parents, moderate drinking predicted the perception most and was negatively associated with parental alcohol measures which indicated that moderate and heavy drinking Dutch parents were less strict in their perceptions than parents who drank less. Also Dutch mothers were stricter in their perceptions of parental alcohol measures. Age, living in a metropolitan or town area, and light drinking was only weak but significant associated with the Dutch parents' perception. Alcohol use, especially frequent and heavy drinking influenced the parental perspective only negatively among Dutch parents. Not drinking regularly, education level and living in an urban area among Dutch parents, and drinking patterns, education level, age, and urbanization rate among Norwegian parents were non-significant predictors.

Predictors of perceptions on parental drug measures

The model predicting perception on parental drug measures explained 5% of the variance among Dutch parents and 3% among the Norwegian parents. Lifetime cannabis use among Dutch parents and current cannabis use among Norwegian parents were the strongest predictors and negatively associated with parental perception meaning that these parents were less positive about the parental measures. Current ecstasy use in the Norwegian model, current cocaine and heroin use in the Dutch and Norwegian model were deleted from analysis as the sample did not include current ecstasy, cocaine or heroin users. Dutch men, Dutch lifetime cocaine users and Norwegian lifetime cannabis users were weaker and negatively related to the perceptions. Urbanization rate, education level, and age did not predict the parental perceptions among Dutch and Norwegian parents.

Parental perceptions on parental measures to prevent substance use

Table 5: Multiple linear regression model of sum scores of parental perceptions on parental measures related to alcohol and drug use (1 totally disagree - 5 totally agree)

Parental perceptions on parental measures on		B	B	SE	SE	β	β	p	p
		(NL)	(NO)	NL)	(NO)	(NL)	(NO)	(NL)	(NO)
	Independent variables								
Alcohol ^a n=1979 (NE) n=829 (NO)	(Constant)	35.912	34.963	1.291	1.025	-	-	.000*	.000*
	Age ¹	.041	.031	.010	.016	.089	.068	.000*	.052
	Gender ²	-.904	-1.151	.183	.260	-.112	-.153	.001*	.000*
	Urbanization rate ³								
	Metropolitan area	.661	.652	.254	.384	.079	.077	.009*	.090
	Town area	.744	.852	.270	.385	.080	.100	.006*	.027
	Urban area	.285	.223	.273	.383	.030	.026	.296	.561
	Education level ⁴								
	Low educated	-2.293	-.494	1.173	.921	-.252	-.028	.051	.592
	Middle educated	-1.784	-.690	1.168	.745	-.218	-.089	.127	.355
	High educated	-1.058	-.178	1.170	.736	-.126	-.024	.366	.809
	Alcohol use per week ⁵								
	Non frequent drinking	-5.517	-4.371	1.392	3.683	-.087	-.040	.000*	.236
	Light drinking	-1.427	.233	.384	.568	-.170	.031	.000*	.682
	Moderate drinking	-2.752	-.875	.392	.580	-.319	-.110	.000*	.132
	Heavy drinking	-3.874	-2.136	.494	1.073	-.248	-.078	.000*	.047
	Non regular drinking	-.757	1.211	.400	.634	-.076	.112	.059	.056
Drugs ^b n=1978 (NE) n=842 (NO)	(Constant)	35.796	38.064	1.233	.765	-	-	.000	.000
	Age ¹	.011	-.002	.010	.013	.026	-.005	.396	.900
	Gender ²	-.616	-.477	.177	.215	-.079	-.076	.002*	.027
	Urbanization rate ³								
	Metropolitan area	.219	.599	.252	.324	.027	.086	.384	.065
	Town area	.557	.417	.267	.324	.062	.059	.037	.199
	Urban area	.221	.410	.270	.323	.024	.058	.413	.205
	Education level ⁴								
	Low educated	.219	-.183	1.158	.787	-.081	-.012	.542	.816
	Middle educated	.557	-.082	1.153	.638	-.038	-.013	.798	.897
	High educated	.221	-.169	1.154	.630	.042	-.027	.768	.788
	Drug use ⁶								
	Current cannabis use	-1.929	-4.903	.857	1.180	-.053	-.161	.024	.000*
	Lifetime cannabis use	-1.251	-.920	.221	.306	-.135	-.110	.000*	.003*
	Current ecstasy use	-7.289	-	3.862	-	-.043	-	.059	-
	Lifetime ecstasy use	.365	-1.810	.545	1.052	.018	-.084	.503	.086
	Current cocaine use	-	-	-	-	-	-	-	-

Parental perceptions on parental measures on	B (NL)	B (NO)	SE NL	SE (NO)	β (NL)	β (NO)	p (NL)	p (NO)
Lifetime cocaine use	-2.005	1.583	.620	.903	-.089	.020	.001*	.080
Current heroin use	-	-	-	-	-	-	-	-
Lifetime heroin use	1.111	.156	1.225	1.284	.021	.005	.364	.903

* significant with $p > 0.01$

^a NE: $R=.325$, $R^2=.105$, Adjusted $R^2=.099$, $F(13, 1966)=17.819$, $p=.000$

NO: $R=.300$, $R^2=.090$, Adjusted $R^2=.076$, $F(7, 816)=6.211$, $p=.000$

^b NE: $R=.231$, $R^2=.053$, Adjusted $R^2=.047$, $F(14, 1964)=7.917$, $p=0.000$

NO: $R=.205$, $R^2=.042$, Adjusted $R^2=.027$, $F(13, 829)=2.790$, $p=.001$

¹ Age: Higher age indicates higher agreement

² Gender: 0=women, 1=men

³ Urbanization rate: 0=no 1=metropolitan area, town area, urban area

⁴ Education level: 0=no, 1=low educated, middle educated, high educated

⁵ Alcohol use per week: 0=no, 1=<1 drink, 1-5 drinks, 6-20 drinks or does not drink regularly

⁶ Drug use: 0=no, 1=current/ lifetime cannabis use, current/ lifetime ecstasy use, current/ lifetime cocaine use, current/ lifetime heroin use

Discussion

The aim of this study was to investigate the perceptions of parents on parental measures to prevent adolescents from using alcohol and drugs in the Netherlands and Norway and how parents view governmental responsibility to prevent adolescents from substance use. Dutch and Norwegian parents agreed that mainly parents themselves rather than the government were responsible for taking measures. They also indicated that parents should be pro-active in taking parental measures to prevent adolescents from substance use. In general, Norwegian parents agreed more strongly than Dutch parents with taking parental measures. However, only small significant differences between Dutch and Norwegian parents were found. The perceptions on parental alcohol measures were most related to moderate and heavy drinkers among Dutch parents and to gender among Norwegian parents. Dutch heavy and moderate drinkers were more negative in their perception than parents who drunk less and Norwegian mothers were more in favour to take measures than Norwegian fathers. Regarding the perceptions on drug parental measures, lifetime cannabis use was the strongest predictor among Dutch parents and current cannabis use among Norwegian parents. The results showed as well that Dutch fathers, Dutch lifetime cocaine users and Norwegian lifetime cannabis users were more negatively related than Dutch mothers and Dutch and Norwegian non lifetime users.

The results suggest that different policies within both countries may play a minor role with regard to parental perceptions on parental measures. The differences be-

tween Dutch and Norwegian parents were small which resulted in small effect sizes. In line with this finding, parents from both countries experienced it as more important to that they take measures themselves than that government takes measures to prevent adolescents from alcohol use and drug use. Comparing the more restrictive policy in Norway and the less restrictive policy in the Netherlands, Norwegian parents did not give more responsibility to the government to prevent adolescents from substance use than Dutch parents did regardless national alcohol and drug policies.

The findings also suggest that fathers from both countries were less strict in their perceptions on parental measures to prevent adolescents from substance use than mothers, especially with regard to parental measures on alcohol. This is in line with Petterson et al. [23] who found that fathers had a more non-restrictive attitude. Regarding alcohol consumption this may be due to higher consumption rates by fathers which was also suggested by Mares, van der Vorst, Engels & Lichtwarck-Aschoff [24] as an explanation for differences in effects of fathers and mothers on adolescents' alcohol use.

In relation to the effects of parental alcohol use on parental perceptions, other studies also showed negative relations between alcohol use with alcohol-specific parenting [25, 26]. Apparently, drinking behavior among Norwegian parents seems to be decoupled from their view on taking parental measures, while there is association among Dutch parents. Further research is needed to explore this further.

According to drug measures, only lifetime cannabis and cocaine use among Dutch parents and cannabis use among Norwegian parents had a small effect. The low prevalence among Dutch parents and the non prevalence of the Norwegian parents on ecstasy, cocaine and heroin might explain the weak association between parental perceptions and drug use in both countries. That not the same variables influenced the perception of the Dutch and Norwegian parents might be a result of the low explained variance of the drug model and the deletion of current ecstasy, cocaine and heroin use within the drug model.

Comparing the outcomes of the regression analyses with the outcomes of other studies on the opinion on alcohol policy [27-30], some relevant comparisons can be made. Drinking pattern among Dutch parents as well as gender among the Norwegian parents influenced perceptions on alcohol measures. Using cannabis influenced perceptions on drug measures also negatively. It seems that substance use may as well contribute to perceptions on parental alcohol and drug measures as alcohol consumption does on alcohol policy measures in the studies of Giesbrecht et al. [28], Bongers et al. [27], Room et al. [30] and Holmila et al [29].

From former studies it is known that family factors do have an effect in protecting adolescents against the onset of using various substances [2] and that preventive interventions for adolescents are most effective when children and parents are targeted simultaneously [31], and actively involved [32]. Together with the results of this study that shows parental willingness to take measures to prevent youth from sub-

stance use, it seems evident to involve parents in interventions. The public health sector should benefit from that by involving parents in interventions targeting substance use among adolescents.

Although this study has several strengths, such as large sample size and cross-national data, some limitations should be considered. First, the Dutch and Norwegian parents were not defined in a completely similar way. Within the Dutch sample respondents were defined as parents if they had children living at home while in the Norwegian sample respondents were selected if they had children < 18 years living at home. As a consequence, the Dutch sample included also parents with older children (> 18 years). However, as this group is small and this study focuses on parental perceptions to take parental measures to prevent children from substance use and not what kind of measures in particular they take to protect their own children, this would not have biased the results seriously. Second, the parents included in this study were not a representative sample of the Dutch and Norwegian population. The Norwegian sample included a relatively high percentage of high educated parents. In the literature this has been described as a disadvantage of doing online survey research [33-35]. However, it is unlikely that this may have biased the main patterns of the results in these two countries. Third, the regression analyses showed only a small amount of explained variance. Therefore the results of the regression analysis of the drug model should be interpreted carefully. It may indicate that also other factors than those included in this study may predict the parental perceptions. Further research is therefore needed. Fourth, this study has a cross-sectional design for which reason causal relationships cannot be inferred. Although these limitations need to be considered, this study is one on the first cross-national study that compares parental perceptions on parental measures to prevent adolescents from substance use. More research is needed to overcome the limitations and to fully understand how and why differences and similarities in relation to parental measures to prevent adolescents from substance use over country borders occur.

Taken as a whole, this study showed that Dutch and Norwegian parents agreed that parental measures should be taken to prevent adolescents from substance use. Parents from both countries feel a responsibility to prevent adolescents from substance use regardless the differences between national alcohol and drug policies in the Netherlands and Norway; this seems not to play a role in this context. However, the positive perceptions on the parental measures suggest that parents themselves agree with being involved in interventions. Policy makers and public health authorities should benefit from that by involving parents in drugs and alcohol interventions targeting adolescents' substance use.

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4

Acceptance of illicit drug use in the Netherlands and Norway

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Abstract

Aims: This study aims to explore differences between Dutch and Norwegian adults in the acceptance of illicit drug use in relation to the normalization thesis.

Methods: Data was collected in November 2008. In total, 2,150 Norwegian and 5,616 Dutch respondents were included and the samples were weighted. The level of acceptance was assessed by measuring beliefs and opinions among Dutch and Norwegian people of 16 years and older and among different user groups in the Netherlands and Norway. T-tests, χ^2 -tests, and multiple regression analyses were conducted to examine differences between both countries.

Results: Norwegian and Dutch respondents were somewhat reserved concerning the acceptance of illicit drug use. However, the acceptance of illicit drugs among Dutch respondents was significantly higher compared to Norwegian respondents. Regarding different user groups even non-users in both countries showed a significant difference, with Dutch non-users accepting illicit drug use to a larger extent than Norwegian non-users.

Conclusions: According to the findings of this study, the acceptance of illicit drug use seems to be larger in the Dutch society than in the Norwegian society.

Introduction

The shift from using drugs as an extraordinary habit to using drugs that appear to be more accepted has led to studies examining whether illicit drug use has become 'normalized' within the last 15 years [1-5]. Parker and colleagues [2, 6, 7] in particular have investigated the process of normalization of adolescent recreational drug use most fully and proposed the normalization thesis as a way to describe and explain the popularity and the changing natures of drug use among young people in the context of the post-modern and risk-laden society [2, 7]. The normalization thesis defines six dimensions that can be used as a guideline for examining whether recreational illicit drug use has been normalized among young people: 1) Availability and accessibility of illicit drug use, 2) drug use and drug trying rates, which refers to the trying rates of illicit drug use, in particular among adolescents, 3) recent and regular drug use, which focuses on recent use and more important growth trends in recreational drugs over the years, 4) social accommodation of 'sensible' recreational drug use, which concerns attitudes towards drug use of people who did not use any drugs and ex 'triers' 5) cultural accommodation, which is the acceptance of recreational drug use in discrete societies, and 6) 'state responses' in legislation and 'anti'-drug policy' [6] as the political response to prevent illicit drug use. In this context the use of illicit drugs has become accepted among young people when all these dimensions can be observed within a society.

However, the acceptance of illicit drug use in and across societies, especially among adults, has not yet been studied extensively. Determining the level of acceptance is important for effective development of drug prevention programs and harm reduction strategies [1]. Moreover, from 1995 and onwards, the use of drugs increased among 15-16 year old European students [8] and most of these (lifetime) users now belong to the adult population. Therefore, also among adults, normalization of illicit drug use might have been developed over time. This study aims at examining the acceptance of illicit drug use in relation to the normalization thesis among the adult population.

From a Dutch policy oriented point of view, illicit drug use is seen as a behavior that can not be totally banned [9]. The use of illicit drugs is seen as an unavoidable reality in society, and one which can not be eliminated with strict and stringent policy measures [10]. The focus of the Dutch drug policy is on the harm caused by the use of drugs [11]. The Dutch drug law prescribes that possession, except the possession of less than 5 gram of cannabis, dealing and production of all drugs is punishable but not the use of drugs [12]. Another aim of the Dutch drug policy is to administer, decriminalize and regulate the sale of cannabis [13]. The Dutch drug policy differentiates between cannabis (soft drugs) policy measures and hard drugs (e.g. ecstasy, amphetamines, cocaine, heroin, LSD) policy measures. This segregation of the markets for soft and hard drugs was introduced in the seventies. The underlying argument was that by

separating the markets, cannabis users are no longer dependent on the illegal market and switching to other more harmful drugs may reduce as these are not sold in coffee shops [9]. This was operationalized by licensed coffee shops that must comply with strict rules for selling cannabis. Here, customers can buy only cannabis for personal use. In recent years, the Dutch drug policy has become more restrictive, especially with regard to the sale of cannabis in coffee shops. However, illicit drug use is still approached as a behavior taking place in Dutch society that can not be totally banned. This may have also resulted into a greater acceptance of illicit drug use in the Dutch society over the years compared to other countries, for example Norway.

Norway is a country with a stringent drug policy. General assumptions of the Norwegian drug policy are that drugs are and will remain illegal, that all persons with a drug addiction are entitled to a worthwhile life, and that it promotes a restrictive drug policy. The Norwegian drug policy states that *'all use, possession, dealing and other forms of illegal handling of narcotic substances and prescription drugs may render offenders liable to prosecution in Norway'* [14, p.11]. Over last number of years, Norwegian drug policy has been continuously intensified. Currently, Norwegian drug policy is pursuing a dual track in the sense that a system of repressive punishment exists in parallel with an increased focus on harm reduction efforts [15].

Besides differences in drug policies, prevalence rates between the Netherlands and Norway also differ. The difference is most prominent for cannabis use. 23% of the population between 15 to 65 years old in the Netherlands had ever used cannabis [16] against 16.2% of the Norwegian population [17]. Prevalence rates of other sorts of drugs than cannabis were lower in Norway than in the Netherlands. In 2005, the lifetime use of ecstasy, cocaine, amphetamine, LSD and/or heroin was 6.1 % among Dutch 15 to 65 year olds. [16]. In Norway, lifetime use of cannabis, amphetamine, cocaine, ecstasy and heroin, remained stable on a relatively low level (<3.8%). Of these drugs, amphetamine had the highest prevalence [17].

The dimensions of Parker's normalization thesis are a useful tool to explore the normalization of drug use also among the adult population and across societies. Considering the differences in drug policies and prevalence rates between Norway and the Netherlands, it may be expected that according to Parker's normalization thesis, the acceptance of illicit drug use would be higher among Dutch than Norwegian citizens: illicit drugs are more available and accessible in the Netherlands (first dimension), prevalence rates of cannabis use in particular are higher (second and third dimension) and because the Dutch drug policy interpret illicit drug use as something that can not be totally banned from society (sixth dimension).

However, to determine the acceptance of illicit drug use, the social and cultural accommodation in society is also important. Parker determines social accommodation as an essential measure on the scale of normalization, in particular among people who never used drugs and lifetime users [2]. The cultural accommodation is reflected mostly in how drug use is being accommodated in cultural understandings. For in-

stance, the extent to which drug use is discussed in the media on TV and in magazines reflects to what extent illicit drug use is accepted or not [2].

A former study reported that own cannabis use affects one's opinion in relation to restrictive policy measures [18], and the same pattern has been shown for drinking patterns in relation to alcohol policy measures [19-23]. Comparing different user groups and their acceptance of illicit drug use is therefore of value. Non-users are particularly interesting because this group of abstainers provides a broader indication of the level of normalization in the society [6]. In addition to the acceptance of illicit drug use among non-users, current users are of value to indicate contrasts in level of acceptance across country borders.

Therefore, the overall aim of this study is to examine the acceptance of illicit drug use in relation to the normalization thesis among Dutch and Norwegian people of 16 years and older. It focuses on differences in the acceptance of illicit drug use and explores influences. According to Parker's normalization thesis, a higher level of acceptance is to be expected in the Netherlands, taking the differences in prevalence rates and drug policy into account. This study focuses on the cultural and social accommodation in both Dutch and Norwegian societies. The research questions are: 1) What is the level of acceptance of the Dutch and Norwegian respondents on illicit drug use? 2) What is the level of acceptance of current users and those who never have used drugs on illicit drug use? 3) Which factors affect the acceptance of illicit drug use?

Methods

The present study is part of a cross-sectional internet survey examining opinions on alcohol and drug policy, and alcohol and drug use in Norway and the Netherlands. Data was collected in both countries in November 2008. In the Netherlands, an already existing panel was used to collect the data (Longitudinal Internet Studies for Social sciences, LISS) administered by CentERdata. This representative panel of the Dutch population received monthly online questionnaires, each time addressing a different topic. In total, 5,000 households with 8,280 panel members were included in the LISS panel. Panel members who completed online questionnaires received a monthly incentive. The Dutch online questionnaire was sent to all panel members. Two reminders were sent to increase the response rate. In Norway, data was derived from a subsample of a web panel administered by Synovate. The members of this panel were recruited through telephone interviews with respondents in general population surveys, who were assumed to be representative for the Norwegian adult population. Initially, 5,998 households were selected.

The reported results are based on weighted sample sizes and are considered to be a representation of the Dutch and Norwegian population. The Dutch sample was weighted on age, gender and education level while the Norwegian sample was

weighted on age, gender and geography. The argument for using different weighting schemes was that the Norwegian sample differed more in geography than in education level compared to the overall Norwegian population.

Measures

The Norwegian and Dutch questionnaires were essentially identical. Due to the different cannabis policy in the two countries, items addressing cannabis policy measures were slightly different. The social and cultural accommodation were made operational by examining beliefs about acceptance of illicit drug use and opinions on some drug policy measures. Beliefs about the acceptance of illicit drug use were divided into i) the respondent's thoughts regarding the acceptance of drug use, and ii) what the respondents experienced as 'normal' in their society with regard to drug use. Both topics were measured on 7-point Likert scales ranked from totally disagree '1' to totally agree '7'. Regarding drug policy measures, the respondents were asked for their opinion on the prohibition of illicit drug use, strictness of the drug policy in both countries, and the differentiation in legal status between cannabis and other drugs. These items were measured on a 5-point Likert scale: totally disagree '1', disagree '2', neither agree nor disagree '3', agree '4' and totally agree '5'. Illicit drugs were defined as cannabis, cocaine and heroin. The term 'other drugs' was used when cannabis was compared to drugs other than cannabis.

Illicit drug use was investigated by asking the respondents whether they had ever used cannabis, cocaine or heroin, or not (lifetime use or non-use), whether they had used these substances in the last 30 days (current use), and how frequently they had used these substances (on average 6-7 days a week, on average 2-5 days a week, on average 1 day a week, on average less than once a week, never). Non-users were defined as respondents who had never used cannabis, cocaine and heroin. Current users were defined as those who had used cannabis, cocaine and heroin in last 30 days and lifetime users were defined as those who had not used cannabis, cocaine and heroin within last 30 days. Demographic variables are shown in Table 1. Educational level and urbanization rate were converted to categories similar for both countries. 'High education' refers to university and bachelor degree, 'middle education' refers to secondary vocational education and pre-university education, and 'low education' refers to primary and compulsory education.

Statistical analysis

Items on the acceptance of cocaine and heroin use were taken together as these items showed a high level of correlation. First, descriptives of demographic variables and

illicit drug use were calculated. Independent t-tests were conducted to estimate differences between Dutch and Norwegian respondents, Dutch and Norwegian non-users and Dutch and Norwegian recent users. Because of low prevalence rates of recent users to examine the acceptance of illicit drug use only recent cannabis users were included. To provide an indication of the magnitude of the differences between Dutch and Norwegian respondents, effect sizes were calculated with 0.01 classified as a small effect, 0.06 as a medium effect, and 0.14 as a large effect [24]. χ^2 -tests were conducted to calculate differences in proportion sizes between Dutch and Norwegian illicit drug use.

Multiple regression analyses were conducted to predict the acceptance of illicit drug use. A sum score, calculated only for respondents that filled out more than seven items, was used to predict the level of acceptance. The sum score consisted of 9 items, measured on a 7-point Likert scale (see Table 3). Cronbach's alpha for this scale was 0.77. Demographic variables as age, gender, urbanization rate, being Dutch or Norwegian, education level and illicit drug use were independent variables. Categorical variables were converted with dummy coding. Respondents belonging to a particular category were assigned with code 1. All others were coded with 0. Being a student, living in a rural area and never having used cannabis, cocaine and heroin served as reference groups within the regression analyses. In both countries the prevalence rates of current cocaine and heroin users were too small to include these groups in the regression analysis.

Results

Table 1 presents the characteristics of the weighted study sample. A total of 5,616 (67.2%) Dutch and 2,150 (35.9%) Norwegian respondents filled out the questionnaire. The average age was higher among Dutch respondents; they lived more in metropolitan areas and were less high educated compared to the Norwegian respondents.

Chapter 4

Table 1: Demographic variables of the weighted Dutch and Norwegian sample

		Netherlands (N=5616)	Norway (N=2150)
		Mean (SD)	Mean (SD)
Age (years)		46 (17)	45 (17)
		%	%
Age	15 – 24 y	13 (n=752)	14 (n=297)
	25 – 34 y	15 (n=854)	17 (n=365)
	35 – 44 y	20 (n=1096)	19 (n=412)
	45 – 54 y	18 (n=1011)	17 (n=355)
	55 – 64 y	16 (n=882)	20 (n=426)
	>65 y	18 (n=1022)	14 (n=295)
Gender	Men	49 (n=2775)	49 (n=1059)
	Women	51 (n=2841)	51 (n=1091)
Urbanization	Metropolitan area	39 (n=2198)	32 (n=678)
	Town area	23 (n=1267)	25 (n=540)
	Urban area	22 (n=1253)	27 (n=585)
	Rural area	16 (n=899)	16 (n=347)
Level of education	Low education	28 (n=1598)	12 (n=264)
	Middle education	36 (n=2024)	33 (n=703)
	High education	24 (n=1382)	46 (n=983)
	Students	11 (n=613)	9 (n=201)

Prevalence illicit drug use

Table 2 shows the prevalence rates of current use and non-use of cannabis, cocaine and heroin. Cannabis was the most currently used drug: 3.7% of the Dutch and 1.7% of the Norwegian respondents used cannabis currently. Significantly more Dutch than Norwegian respondents were current cannabis or cocaine users. In both countries almost none used heroin currently.

Table 2: Weighted illicit drug use of current users and non-users* from the Netherlands and Norway (Chi square)

		Netherlands	Norway
Illicit drug use	<i>Cannabis</i>		
	Cannabis current use	3.61 (n=203)	1.72 (n=37) ^a
	Cannabis non use*	76.03 (n=4270)	83.58 (n=1797) ^b
	<i>Cocaine</i>		
	Cocaine current use	.41 (n=23)	.04 (n=1) ^c
	Cocaine non use*	94.94 (n=5332)	96.60 (n=2077) ^d

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	Netherlands	Norway
<i>Heroin</i>		
Heroin current use	.05 (n=3)	.00 (n=0) ^e
Heroin non use*	98.02 (n=5505)	99.30 (n=2135) ^f

^a $\chi^2=18.618$ df=1, $p<.001$

^b $\chi^2=51.836$, df=1, $p<.001$

^c $\chi^2=6.651$, df=1, $p=.01$

^d $\chi^2=9.788$, df=1, $p=.002$

^e $\chi^2=1.149$, df=1, $p=.284$

^f $\chi^2=5.930$, df=1, $p<.001$

* non-users are those who have never used illicit drugs

Acceptance among Dutch and Norwegian respondents

In general, both Dutch and Norwegian respondents were reserved concerning the acceptance of illicit drug use. However, significant differences between the two countries were found. On average, the acceptance of Norwegian respondents was lower than that of the Dutch respondents (Table 3). Both groups scored higher on items related to the acceptance of cannabis than on items related to cocaine/heroin or other drugs. Differences between Dutch and Norwegian respondents were strongest for the prohibition of cannabis use and the prohibition of the use of other drugs, for the legislation of drug use, the acceptance of friends using cannabis, and the differentiation in the legal system between cannabis and stronger drugs. The prohibition of cannabis was supported by 78.1% of the Norwegians and 39.8 % of the Dutch, while prohibition of the use of other drugs was supported by 93.1% of the Norwegians and 69.6% of the Dutch.

Table 3: Weighted data (% , N) from t-tests measuring acceptance by Dutch and Norwegian respondents

			t-test		
	Netherlands	Norway			
	Mean (SD)	Mean (SD)	t	df	Effect size
(1 totally disagree - 7 totally agree)					
The fact that cannabis is used ought to be accepted in Norway/ the Netherlands	3.4 (±1.9) n=5556	2.1 (±1.7) n=2138	21.0**	5238.9	.05
The fact that cocaine/heroin is used ought to be accepted in Norway/ the Netherlands	1.9 (±1.2) n=5553	1.3 (±.9) n=2141	20.4**	5187.5	.05
Cannabis has come to stay in the Netherlands/Norway	4.9 (±1.7) n=5539	4.0 (±2.0) n=2139	18.0**	3344.9	.04
Cocaine/heroin has come to stay in the Netherlands/Norway	3.4 (±1.7) n=5535	3.4 (±2.0) n=2138	7.5**	3453.8	.001

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	Netherlands Mean (SD)	Norway Mean (SD)	t-test		
			t	df	Effect size
Use of cannabis is accepted by many	4.9 (±1.6) n=5491	4.1 (±1.8) n=2134	18.2**	3510.5	.04
Use of cocaine/heroin is accepted by many	2.9 (±1.4) n=5481	2.5 (±1.3) n=2138	12.3**	4315.3	.02
Regulation on cannabis and other sorts of drugs is too strict in the Netherlands/Norway	2.5 (±1.4) n=5566	2.1 (±1.4) n=2143	11.8**	7707.0	.02
The legal system should (still) differentiate between cannabis and stronger drugs	4.7 (±2.0) n=5544	3.3 (±2.1) n=2136	26.2**	3607.7	.08
Drug use should be legal	2.5 (±1.7) n=5547	1.5 (±1.2) n=2134	28.1**	5467.6	.09
<i>(1 totally disagree - 5 totally agree)</i>					
In my opinion it is acceptable when my friends use cannabis once in a while	2.6 (±1.3) n=5552	1.8(±1.2) n=2143	26.9**	4374.5	.09
In my opinion it is acceptable when my friends use cocaine/heroin once in a while	1.5 (±0.7) n=5563	1.2 (±0.4) n=2147	23.6**	6130.3	.07
Cannabis use must be prohibited	3.1 (±1.3) n=5575	4.2 (±1.2) n=2143	-36.7**	4443.4	.15
Use of other sorts of drugs must be prohibited	3.8 (±1.2) n=5574	4.7 (±0.8) n=2139	-34.6**	5644.0	.13

* significant at $p < .01$

** significant at $p < .001$

Acceptance among Dutch and Norwegian non-users and users

Dutch non-users of cannabis, cocaine and heroin accepted illicit drug use more than Norwegian non-users (Table 4). However, both Dutch and Norwegian non-users accepted the use of cannabis more than cocaine/heroin or other drugs. Here the effect sizes were largest for the prohibition of cannabis use and the use of other sorts of drugs, for the acceptance of cannabis in the Dutch or Norwegian society, for the differentiation between cannabis and other drugs in the legal system and for the acceptance of friends using cannabis. Dutch and Norwegian current cannabis users showed differences only regarding opinions on the regulation of illicit drug use, the differentiation between cannabis and other drugs in the legal system, and prohibition of using other types of drugs (Table 5).

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Table 4: Weighted data from t-tests measuring acceptance by Dutch and Norwegian non-users[†] of cannabis, cocaine and heroin

	Netherlands	Norway	t-test		
	Mean (SD)	Mean (SD)	t	df	Effect size
(1 totally disagree-7 totally agree)					
The fact that cannabis is used ought to be accepted in Norway/ the Netherlands	2.9 (±1.8) n=4215	1.8 (±1.3) n=1783	28.4**	4363.4	.12
The fact that cocaine/ heroin is used ought to be accepted in Norway/ the Netherlands	1.8 (±1.2) n=4212	1.3 (±0.9) n=1786	18.4**	4690.5	.05
Cannabis has come to stay in the Netherlands/ Norway	4.6 (±1.7) n=4195	3.73 (±2.0) n=1785	16.7**	2953.0	.04
Cocaine/ heroin has come to stay in the Netherlands/ Norway	3.9 (±1.7) n=4192	3.4 (±1.9) n=1784	9.2**	3002.8	.01
Use of cannabis is accepted by many	4.7 (±1.6) n=4152	3.9 (±1.8) n=1782	17.2**	3156.5	.05
Use of cocaine/heroin is accepted by many	3.0 (±1.5) n=4146	2.5 (±1.3) n=1785	13.4**	3836.6	.03
Regulation on cannabis and other sorts of drugs is too strict in the Netherlands/ Norway	2.4 (±1.4) n=4227	1.9 (±1.2) n=1789	14.8**	3812.1	.04
The legal system should (still) differentiate between cannabis and stronger drugs	4.4 (±2.0) n=4208	2.9 (±2.0) n=1781	27.3**	5987.0	.11
Drug use should be legal	2.3 (±1.7) n=4212	1.4 (±1.1) n=1779	24.20**	4860.7	.09
(1 totally disagree-5 totally agree)					
In my opinion it is acceptable when my friends use cannabis once in a while	2.3 (±1.2) n=4227	1.5 (±.9) n=1789	26.7**	4342.6	.10
In my opinion it is acceptable when my friends use cocaine/ heroin once in a while	1.4 (±0.6) n=4232	1.1 (±.4) n=1793	21.6**	5456.7	.07
Cannabis use must be prohibited	3.4 (±1.3) n=4231	4.4 (±1.0) n=1788	-34.1**	4330.3	.16
Use of other sorts of drugs must be prohibited	4.0 (±1.1) n=4229	4.7 (±.7) n=1784	-29.4**	4847.0	.13

* significant at $p < 0.01$

** significant at $p < 0.001$

[†] non-users are those who have never used illicit drugs

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Table 5: Weighted data from t-tests measuring acceptance by Dutch and Norwegian current cannabis users

	Netherlands	Norway	t-test		
	Mean (SD) n=202	Mean (SD) n=37	t	df	Effect size
<i>(1 totally disagree-7 totally agree)</i>					
Regulation on cannabis and other sorts of drugs is too strict in the Netherlands/ Norway	3.4(±1.4) n=202	4.6 (±1.7) n=37	-4.8**	237	.09
The legal system should (still) differentiate between cannabis and stronger drugs	5.6 (±1.8) n=202	6.39 (±1.3) n=37	-2.7*	237	.03
<i>(1 totally disagree-5 totally agree)</i>					
Use of other sorts of drugs must be prohibited	2.9 (±1.4) n=203	3.8 (±1.4) n=37	-3.4**	238	.05

* significant at $p \leq 0.01$ (t-test)

** significant at $p \leq 0.001$ (t-test)

Predictors of level of acceptance

Table 6 shows the results of the regression analysis. Due to the small prevalence rates of heroin use, this was not included in the model. Dutch respondents seem to have a higher level of acceptance of illicit drug use. Both current and lifetime cannabis use influence the level of acceptance positively, indicating that they accepted illicit drug use more than non cannabis users. Lifetime cocaine use, gender, living in a metropolitan area, and age had only minor but significant influence on the level of acceptance. Educational level and living in a town or urban area did not affect the level acceptance significantly.

Table 6: Multiple linear regression model of level of acceptance of illicit drug use (1 totally disagree - 5 totally agree)

Level of acceptance	n=7656	B	SE	β	p
<i>Independent variables</i>					
(Constant)		24.33	.41		<.001*
Age ¹		-.04	.001	-.07	<.001*
Gender ²		.70	.18	.04	<.001*
Country ³		6.72	.21	.33	<.001*
<i>Urbanization rate⁴</i>					
Metropolitan area		.89	.27	.05	.001*
Town area		.14	.29	.01	.620
Urban area		.10	.29	.001	.720

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Level of acceptance	n=7656	B	SE	β	p
<i>Education level⁵</i>					
Low educated		-.86	.40	-.04	.030
Middle educated		-.45	.35	-.02	.201
High educated		.24	.37	.01	.511
<i>Drug use⁶</i>					
Current cannabis use		9.67	.56	.19	<.001*
Lifetime cannabis use		5.98	.25	.25	<.001*
Lifetime cocaine use		2.55	.52	.05	<.001*

* significant at $p < 0.01$

$R=.51$, $R^2=.26$, Adjusted $R^2=.26$, $F(12, 7643)=220.674$, $p<.001^*$

¹ Age: Higher age indicates higher agreement

² Gender: 1=men, 0=women

³ Country: 1=Netherlands, 0=Norway

⁴ Urbanization rate: 1=living in metropolitan area, town area, urban area, 0=not living in metropolitan area, not living in town area, not living in urban area

⁵ Education level: 1=low, middle, high educated, 0=not low educated, not middle educated, not high educated

⁶ Drug use: 1=current/ lifetime cannabis use, current/ lifetime ecstasy use, lifetime cocaine use, lifetime heroin use, 0=no current/ lifetime cannabis use, no current/ lifetime ecstasy use, no lifetime cocaine use, no lifetime heroin use

Discussion

This study examines differences between Dutch and Norwegian adults on the acceptance of illicit drug use and explores influences on the level of acceptance in relation to the normalization thesis. In general, Dutch and Norwegian respondents had reservations concerning the acceptance of illicit drug use. However, Dutch respondents tended to accept cannabis and cocaine/heroin more than the Norwegians. It seems that the Dutch respondents accept illicit drug use more as a 'normal' part of the society. In both countries cannabis use was more accepted than cocaine/heroin use. The greatest differences between the Dutch and Norwegian respondents concerned the general prohibition of drug use. Compared to the Norwegians, Dutch respondents supported the prohibition of cannabis and other drugs less. The non-users in both countries differed significantly from each other, with Dutch non-users showing greater acceptance of illicit drug use than Norwegian non-users. Dutch and Norwegian current cannabis users differed only significantly on some policy related items. Considering the differences in national prevalence rates, the differences between Dutch and Norwegian drug policy, and the findings of this study, it seems that Dutch adults accepted illicit drug use more than the Norwegian adults. This confirms the expectations that illicit drug use is more accepted in the Dutch society than in the Norwegian society.

Adapting these findings to the normalization thesis, the cultural and social accommodation as operated in this study, differed between the two countries. The regression analyses showed that own use and country of residence were related to the acceptance of illicit drug use. An explanation for this finding may be the indirect effect of drug use in society and the way Dutch drug policy is operated, as described in the introduction. This might interact with how Dutch citizens perceive illicit drug use in the Dutch society [9]; even among non-users, the difference in acceptance between the two countries indicates that drug use and national drug policy in society might indirectly affect the level of acceptance. In contrast to the non-users, Dutch and Norwegian current users generally showed no significant differences from each other, implying that own use plays a role in the level of acceptance of illicit drug use, which was confirmed in the regression analysis. This is in line with studies reporting a relationship between opinions and alcohol policy measures [18, 20, 21]. However, the results also suggest that the difference in level of acceptance between the Dutch and Norwegian non-users can not be explained by own use alone. If that was the only factor related to the acceptance of illicit drug use, then there would have been no difference between Dutch and Norwegian non-users.

However, the finding that other factors than own drug use are related to the level of acceptance of illicit drug use, is in line with Parker's normalization thesis. As has been described in the introduction, two of the dimensions of this normalization thesis are built on the use of illicit drugs, i.e. drug-trying rates in adolescence and young adulthood, and current and regular use [2, 6]. Although the present study examines the acceptance level among adults, it is as important to examine the cultural and social accommodation as drug use itself when investigating levels of acceptance. In line with this, Sznitman [4] also found that the normalization thesis goes beyond conventional epidemiological accounts of prevalence rates; cultural change and the shifting symbolic value of drug use as a distinctively cultural practice is therefore of value. This is also emphasized by the findings of this study. It implies that a socio-cultural approach to the level of acceptance is worthwhile in order to unravel the underlying processes regarding normalization in society.

The importance of the cultural and social accommodation of drug use within societies could also be of use for developing drug prevention strategies. Knowing the acceptance of illicit drug use helps governments to think more strategically and managerially about how to respond to these patterns [6]. Moreover, for societies that aim at social inclusion and prefer a pro-active approach that adapts social cultural change, knowing the acceptance level is beneficial for developing social policies and laws [2].

Although this study has several strengths, such as a large sample size and cross-national data, limitations need to be mentioned. First, although the sample was weighted, the Norwegian sample included a relatively high percentage of highly educated people. To analyze the consequences of having a high percentage of highly educated Norwegian respondents additional analyses were done to examine whether

the mean scores of high, middle and low educated people significantly differed from each other. Only in 2 out of 13 items, highly educated Norwegian respondents differed significantly from respondents with low or middle education. The differences were limited to a difference of the mean scores between 0.4 and 0.7. This did not bias the interpretation of the results. Second, the Norwegian sample had a low response rate compared to the Dutch sample. This may be due to the different selection process. In the Netherlands, respondents were included through a panel and were provided with the facilities and incentives for being a panel member. In Norway, active internet users were approached, so people could decline much more easily. This so-called self-selection bias in the literature is described as a limitation of online survey research [25-27]. Thirdly, because this is a cross-sectional study, no conclusions can be drawn about causal relationships and development over time. In addition, comparative cross-national studies need to be interpreted with caution as comparative differences may also be explained by, e.g., economic differences, differences in unemployment rates and other factors [28]. Nevertheless, comparative studies give the possibility to uncover empirical relationships between variables [29], and cross-national differences are expected to be greater than those over time [20]. In addition, not many cross-national studies have been done related to this topic. This study contributes as being one of the first studies that compares the acceptance of illicit drug use across country borders and can be used as a direction to elucidate further on this topic.

Despite these limitations the findings of this study imply that Dutch respondents tend to have a higher level of acceptance of cannabis and cocaine/heroin than Norwegians although they both had reservations on the acceptance of illicit drug use. Factors other than own illicit drug use are related to the level of acceptance of illicit drug use among Dutch and Norwegian respondents which strengthen the idea that the social and cultural accommodation are important contributors for defining the level of acceptance within societies.

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5

The opinion of adolescents and adults on Dutch restrictive and educational alcohol policy measures

Based on: van der Sar, R, Brouwers, EPM, van de Goor, LAM, Garretsen, HFL. The opinion of adolescents and adults on Dutch restrictive and educational alcohol policy measures. Health Policy 2011; 99 (1):10–16.

Abstract

Aims: The main objective of this study is to explore the opinion of 16 to 22 year olds on alcohol policy measures compared to the opinion of adults older than 22 years.

Methods: Data was collected in 2008 by using a Dutch panel. This panel was based on a representative probability sample of households and consisted of 8,280 members of 16 years and older. The study had a cross-sectional design and questionnaires were filled out through internet.

Results: According measures related to the availability of alcohol, the 16 to 18 and 19 to 22 year olds are significantly more negative about these policy measures than the respondents older than 22 years. Educational measures were more popular than restrictive availability measures among all three groups, and the opinions of the groups differed significantly from each other. Own alcohol use seemed to be the main predictor for the opinion on restrictive availability measures.

Conclusions: The 16 to 22 year olds are more negative regarding restrictive availability measures and educational measures than adults older than 22 years, and the restrictive availability measures are less popular than the educational measures among the adolescents.

Introduction

Although prevalence rates of drinking patterns are decreasing in the Netherlands, the prevalence of alcohol consumption is still high, especially among Dutch 15–24-year olds [1]. Sixty-nine percent of Dutch 15–16-year olds had drunk alcohol during the last 30 days, and 16% of those who had drunk alcohol within the last 30 days had been drunk [2].

This high prevalence might be due to the tolerant social-cultural context regarding drinking alcoholic beverages in the Netherlands. Drinking alcoholic beverages is seen and experienced as enjoyable. Because of this, teenagers have a tolerant attitude towards drinking [3]. Dutch adults also have tolerant attitudes towards alcohol consumption. For example, 84% of the parents reported that their children drank their first alcoholic beverage at home [4].

Politically, alcohol use in the Netherlands is seen as a citizens' responsibility rather than a government's responsibility [3, 5], although this attitude seems to be changing. In 2005 the Dutch Ministry of Health, Welfare and Sports announced new policy measures to reduce alcohol abuse among adolescents. The measures to achieve this encompassed stricter regulations in regard to the minimum age of 16 years for drinking beer and wine, stricter regulations for the minimum age of 18 years for drinking spirits, more focus on minimum drinking age through educational programs in schools and, through the involvement of parents, more focus on alcohol-related harm, and the participation of adolescents in the development of alcohol-related policy through the National Youth Committee [6]. In 2007, other policy measures concerning alcohol use among adolescents were proposed by the Ministry of Health, Welfare and Sports. The general aim was to prevent adolescents from drinking before 16 years of age, to decrease the prevalence of alcohol consumption and to reduce alcohol-related harm [7].

In order for this policy to work, support for these alcohol policy measures is of importance. Moreover, because this policy targets adolescents, it is necessary to explore not only the opinion of the adult population, but also the opinion of the specific target group itself. There are two reasons for this. First, being aware of the opinion of adolescents gives policy makers the chance to take their opinion into account when developing alcohol policy for young people. This could increase the chance of success of the measures taken. Secondly, only limited research into the public opinion on alcohol-related policy measures has been done. Most of the opinion-related surveys on alcohol policy measures have been done among an adult population (>18 y) and only occasionally among adolescents and young adults. For example, a study in the United States and Canada showed that policies that control access to alcohol (increasing tax, reducing outlets and shorter hours of sale) were not popular among an adult population (aged >18 years) [8]. The Eurobarometer report showed that restrictive measures that affect young EU citizens (15–24 years) in their alcohol consumption are not in

favour, e.g. price increase, lower BAC limit for young drivers, increasing minimum drinking age [5]. However, factors that were previously found and were positively associated with the adult public opinion on restrictive alcohol policy measures were female sex [9–11], low own alcohol use [8–10, 12], and higher age [8, 9]. Knowing that higher age influences opinion, it would be of interest to study the differences between the opinion of adolescents and the opinion of adults on alcohol policy measures.

In addition to the socio-demographic factors such as age, gender and own alcohol use, not much is known about other factors that might impact the opinion on alcohol policies, in particular those of adolescents. Students have been found to be against restrictive measures such as raising the minimum drinking age and price increases [9]. Among the 12–30 year old Dutch adolescents and young adults the prevalence of drinking increases as they become older, and then declines after 25 years of age [13]. This might be due to the change in social roles; they finish their studies and start working [13]. Concerning urbanization rate, trends from 1997 to 2005 indicated that the prevalence of alcohol consumption is lower in extremely urbanized areas than in very, moderate, or slightly urbanized areas among the Dutch population [1]. Since it is known that own alcohol use, age and gender correlate with the opinion on alcohol policy measures among adults and that social roles and urbanization rate is related to alcohol consumption, all these factors are taken into account as possible predictors of the opinion among adolescents on alcohol policy measures.

In this survey, the main objective is to explore the opinion of 16–22 year olds on alcohol policy measures, compared to the opinion of adults older than 22 years. Policy measures that are considered are those that restrict the availability of alcoholic beverages (physically and financially) and educational measures to prevent adolescents drinking heavily. Furthermore, this study addresses whether factors such as own alcohol use, gender and age might also influence opinion on restrictive availability measures among 16–22 years olds as it does among adults. Social roles, political preference and urbanization rate are included as explorative factors that might impact the opinion among adolescents. It is hypothesized that 1) 16–22 year old adolescents are more negative regarding restrictive availability and educational alcohol policy measures than adults (> 22 years) and 2) that policy measures that restrict the availability of alcoholic beverages are less popular than educational measures among the 16–22 year olds.

The research questions of this study are: 1) what is the opinion of the 16–22 year old adolescents regarding restrictive availability measures and educational measures? 2) Are there differences between the opinions of 16–22 year olds and those of adults (>22 years) on restrictive availability measures and educational measures? 3) Do socio-demographic variables such as gender, social roles, political preference, urbanization rate, age and own alcohol use impact the opinion of the 16–22 year olds on restrictive availability measures and educational measures?

Methods

Three types of alcohol policy measures were investigated in this survey [14, 15]: 1) education and information related measures such as school-based education and public information campaigns; 2) addressing the availability of alcohol e.g. happy hours, selling alcohol pops in supermarkets, selling other alcoholic beverages in supermarkets, selling alcohol in sport canteens; prohibition of alcohol use, and 3) pricing policies, such as increasing price of alcoholic beverages.

The age range of the adolescents has been defined between 16 and 22 years because it includes the Dutch legal minimum drinking age of 16 years for beer and wine and the minimum age of 18 years of spirits, making it possible to differentiate between the opinions of both groups. Twenty-two years has been set as the maximum age to define the group of adolescents. Therefore it include both adolescents who are still students and adolescents who have started working in a full-time job and changed their social role.

Sampling and data collection

This cross-sectional survey was conducted in November 2008. Data was collected by an internet survey using a Dutch panel (Longitudinal Internet Studies for Social sciences, LISS). The LISS panel is based on a representative probability sample of households and has been established by CentERdata, which is a research institute specialised in collecting panel data (see <http://www.lissdata.nl/lissdata/>). The households were selected through random sampling from community registers by Statistics Netherlands. The panel consists 8280 panel members of 16 years and older.

Measurements

Dependent variables

The opinion on restrictive availability measures, educational measures and the pricing measure were scored on a five-point Likert scale ('1' totally disagree, '2' disagree, '3' neither agree nor disagree, '4' agree and '5' totally agree). These are shown in Table 1.

Table 1: statements categorized into alcohol policy measures

Availability	Happy hours in bars and discos should be prohibited
	Supermarkets should not sell alcopops like Breezers
	Supermarkets should not sell any alcoholic beverages at all
	Alcohol should not be sold in places like sport canteens where youth under 16 congregate
	Alcohol should be prohibited
Education	The government should pursue alcohol campaigns
	The government should pursue alcohol education programmes in schools
Pricing	The price of alcohol should be increased

Independent variables

Own alcohol use, urbanization rate, political preference, gender, age and social roles were defined as independent variables. Social roles have been inferred from daily activity of the respondents and therefore this has been defined as daily activity.

Alcohol consumption

Alcohol consumption was measured using five questions according the Quantity Frequency method (QF) [16, 17]: 1) 'How often did you drink alcoholic beverages last 30 days?', 2) 'If you drink on weekdays (Monday through Thursday), on how many days of these four days, on average, do you drink?' 3) 'How many glasses do you drink on average in a weekday?' 4) 'If you drink during the weekend (Friday through Sunday) how many days, on average, do you drink on a weekend day?' 5) 'How many glasses do you drink on average on a weekend day?'. Respondents were classified as abstainers if they had never drunk alcohol. Weekly alcohol use was assessed by multiplying number of drinking week days with number of glasses in a week day and for weekend days multiplying number of drinking weekend days with number of glasses in a weekend day. The respondents were classified in categories due to the alcoholic units drunk within one week (<1 drink a week, 1–5 drinks a week, 6–20 drinks a week, >20 drinks a week) [13].

Urbanization

Urbanization rate was divided into five categories from 1 'very strongly urbanized' to 5 'not urbanized'.

Daily activities

Daily activities were placed into six categories: as 'paid employment', 'student', 'seeking a first job', 'does not work/ does voluntary work', 'does something else', and 'is too young, does not have any daily activities'.

Political preference

Political preference was asked as 'If there were elections for the Lower House today, which party would you vote for?' The respondents could choose one of the political parties, or 'I would not vote', 'I am not entitled to vote', 'other labour party', 'blank', 'I do not want to tell' and 'I do not know'. To make this variable interpretable, the labour parties were categorized into left-wing (Groenlinks, SP and PvdA), conservatives (VVD, PVV, Proud of Holland) and centre or christian-democratic parties (CDA, CU, SGP). All other categories were identified as missing, except the 'I do not know'-category.

Age

Age was categorized into '16 to 18 years', '19 to 22 years', and '> 22 years'.

Statistical analysis

To examine the internal consistency of the three target areas availability, education and pricing the 8 items were subjected to oblique principal component analysis (PCA) using SPSS version 17 (Kaiser-Meyer-Olkin measure of sampling adequacy >0.5, Bartlett's Test of sphericity < 0.05). Subsequently, Cronbach's alphas were calculated for the components indicated by PCA. Reliability above 0.7 was considered as acceptable [18]. The scales were used to explore differences in opinion between the different age categories on restrictive availability measures, educational measures and the pricing measure. ANOVA was used to explore significant differences between the different age groups on the opinion on restrictive availability measures and educational measures. Tukey HSD was used as post-hoc test. Standard multiple regression analyses were conducted to eliminate factors impacting on the opinion on restrictive availability measures and educational measures of the 16–22-year olds. Dummy coding was used to convert the categorical variables such as daily activities, political preference, weekly alcohol use, gender and the age group 16–22 years into dummy variables. Respondents belonging to a particular category were assigned code 1. All other respondents in this category were coded as 0. In total, five dummies were created for daily activity (paid employment, seeking a first job, does not work/ does voluntary work, does something else, goes to school or university), three for political preference (left-wing, centre/ christian-democrat, right-wing/ liberals) and three for weekly alcohol use (0–5 drinks a week, 6–20 drinks a week, >20 drinks a week). Men and the 16–18 year olds

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were coded as 1. The category 'is too young, does not have any daily activities' of the daily activity variable, 'does not know who to vote for' of the political preference variable and, 'never used alcohol' of the alcohol use variable, served as reference groups for these categorical variables.

Results

Table 2: Gender, urbanization rate, drinking pattern, political preference, daily activity of respondents (%)

		16–18 y	19–22 y	> 22 y
Gender	Men	47.3	43.2	45.8
	Women	52.7	56.8	54.2
	Total	100	100	100
Urbanization	Very strongly urbanized	9.3	15.1	13.0
	Strongly urbanized	22.5	23.0	26.4
	urbanized	20.5	22.3	22.9
	Slightly urbanized	25.6	24.5	22.3
	Not urbanized	22.1	15.1	15.4
	Total	100	100	100
Alcohol consumption	< 1 drink a week	1.2	0.0	0.4
	1–5 drinks a week	31.4	33.7	31.0
	6–20 drinks a week	32.9	32.2	35.5
	>20 drinks a week	9.4	15.9	10.6
	Never used alcohol	7.5	5.2	5.5
	Has used but does not drink regularly	17.6	13.0	17.0
	Total	100	100	100
Political	Left-wing	26.9	21.8	30.3
Preference	Centre/ christian-democrats	13.4	17.0	27.0
	Conservatives	17.9	19.7	18.8
	Don't know	41.8	41.5	23.9
	Total	100	100	100
Daily activity	Paid employment	2.7	18.7	76.4
	Seeking first job	0.4	0.4	0.3
	Student	96.1	77.3	1.8
	Does not work/ does voluntary work	0	2.2	20.8
	Has other activities	0.4	0.7	0.7
	Is too young/ does not have any daily activities	0.4	0.7	0.0
	Total	100	100	100

Opinion of adolescents and adults on Dutch alcohol policy measures

In total, 5,616 (67.8%) respondents filled out the questionnaire of which 5,568 (67.2%) were complete and 48 (0.6%) were incomplete. Of the 5,616 respondents, 536 were between 16 and 22 years old, 258 were between 16 to 18 years old, 278 were between 19 and 22 years old and 5,080 respondents were older than 22 years. Table 2 shows the percentages of respondents' gender, weekly alcohol consumption, urbanization rate, political preference and daily activity, categorized by age groups.

PCA identified two components with eigenvalues > 1, explaining 41,5% and 60,6% of the variance respectively [19]. As a result of the PCA, two components were created: availability measures (6 items) and educational measures (2 items). Pricing was included in the availability component. Therefore, in this study pricing is seen as a restrictive availability measure. The Cronbach's alpha of the availability scale was 0.845 and for the education scale 0.753.

Table 3: Results ANOVA on availability measures and educational measures of 16 to 18 year olds, 19 to 22 year olds and older than 22 years (1=totally disagree to 5=totally agree)

	16–18 y	19–22 y	>22
<i>Availability measures</i>	2.16* ^c (±.80) n=256	2.21* ^c (±.78) n=277	2.91* ^{ab} (±.82) n=5064
The price of alcohol should be increased	2.09 (±1.06)* ^c n=255	2.17 (±1.06)* ^c n=276	2.61 (±1.08)* ^{ab} n=5054
Happy hours in bars and discos should be prohibited	2.34 (±1.02)* ^c n=256	2.27 (±1.08)* ^c n=277	3.29 (±1.15)* ^{ab} n=5048
Supermarkets should not sell alcopops e.g. Breezers	2.27 (±1.06)* ^c n=256	2.43 (±1.13)* ^c n=276	3.38 (±1.18)* ^{ab} n=5059
Supermarkets should not sell any alcoholic beverages at all	1.96 (±.95)* ^c n=256	2.12 (±1.07)* ^c n=276	2.78 (±1.17)* ^{ab} n=5042
Alcohol should not be sold in places like sport canteens where youth under 16 congregate	2.63 (±1.14)* ^c n=256	2.64 (±1.20)* ^c n=276	3.42 (±1.19)* ^{ab} n=5052
Alcohol use should be prohibited	1.68 (±.83)* ^c n=256	1.64 (±.75)* ^c n=276	2.00 (±.81)* ^{ab} n=276
<i>Educational measures</i>	3.80* ^{bc} (±.78) n=256	3.99 (±.67)* ^{ac} n=277	4.14 (±.65)* ^{ab} n=5064
The government should pursue alcohol campaigns	3.72 (±.88)* ^{bc} n=256	3.93 (±.77)* ^{ca} n=277	4.07 (±.76)* ^{ab} n=5050
The government should pursue alcohol education programs in schools	3.93 (±.86)* ^c n=256	4.05 (±.74)* ^c n=276	4.20 (±.70)* ^{ab} n=5053

*with $p < 0.01$ and a: 16–18 y, b: 19–22 y, c: >22 y,

Table 3 presents the mean scores of the opinion on the restrictive availability measures and educational measures of the respondents within the different age groups. Concerning the first research question, the 16–18-year olds and the 19–22-year olds disagreed with the restrictive availability measures. They were most negative about prohibition of alcohol and banning the sale of any alcoholic beverages at all in supermarkets. The adolescents agreed with the educational measures and these measures were scored higher than the restrictive availability measures. The mean scores of both age groups did not differ significantly from each other except from the statement that the government should pursue alcohol campaigns ($F(2, 5585)=29.303$, $p=.000$).

Comparing the scale mean scores of the three age categories, there was a statistically significant difference at p-level <0.01 on the opinion scores on the availability measures ($F(2,5594)=190.310$, $p=.000$). The mean scores of the 16–18- and 19–22-year olds differed significantly from the respondents older than 22 years. All respondents in all three age categories disagreed with restrictive availability measures, although the opinion became more positive with increasing age. A significant difference in the opinion on educational measures was also found between the three age categories ($F(2,5594)=36.952$, $p=.000$). All respondents within all age categories agreed with educational measures and the scores increased with age.

Comparing the mean scores of the three age categories on item-level, significant differences between the three age groups were found with a significant p-value ($p=0.000$) for all F-ratios of all items separately at a significance level of $p<0.01$. The 16–18- and 19–22 year olds scored significantly lower on all items separately than the adults, which validates the mean scale availability scores and the mean scale education scores.

Table 4: Multiple regression analysis predicting public opinion towards alcohol policy measures among 16 to 22 year olds

policy measures	n=253	B	β	t	p
Availability measures	(constant)	3.106		5.123	.000
	Gender	-.076	-.048	-.800	.424
	Age category 16–22	.102	.065	1.077	.283
	Urbanization rate	-.005	-.008	-.128	.898
	<i>Political preference</i>				
	Dummy left wing	.067	.036	.567	.571
	Dummy central / christian-democrat	.077	.036	.585	.559
	Dummy right wing/ liberals	-.189	-.095	-1.482	.140
	<i>Daily activity</i>				
	Dummy work paid employment	.216	.086	.346	.730
	Dummy seeking first job	.132	.010	.139	.890

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policy measures	n=253	B	β	t	p
	Dummy does not work/ does unpaid work	-.679	-.091	-.923	.357
	Dummy does something else	1.401	.133	1.623	.106
	Dummy goes to school or university	.148	.064	.241	.810
	<i>Alcohol use</i>				
	Dummy 0–5 drinks a week	-.966	-.599	-5.256	.000*
	Dummy 6–20 drinks a week	-1.259	-.778	-6.814	.000*
	Dummy >20 drinks a week	-1.343	-.610	-6.359	.000*
Educational measures	(constant)	3.686		5.858	.000
	Gender	-.084	-.057	-.853	.394
	Age category 16–22	.199	.135	2.026	.044*
	Urbanization rate	-.023	-.040	-.616	.538
	<i>Political preference</i>				
	Dummy left wing	-.076	-.043	-.618	.537
	Dummy central / christian-democrat	.152	.076	1.106	.270
	Dummy right wing/ liberals	-.054	-.029	-.410	.682
	<i>Daily activity</i>				
	Dummy work employment	-.009	-.004	-.014	.989
	Dummy seeking first job	.639	.053	.646	.519
	Dummy does not work/ does unpaid work	-.490	-.070	-.643	.521
	Dummy does something else	.505	.051	.564	.573
	Dummy goes to school or university	.095	.044	.150	.881
	<i>Alcohol use</i>				
	Dummy 0–5 drinks a week	.215	.143	1.127	.261
	Dummy 6–20 drinks a week	.109	.072	.567	.571
	Dummy >20 drinks a week	.091	.044	.417	.677

* significant with $p < 0.05$

Results of the regression analysis are presented in Table 4. The model has been used to explore the predictors of the opinion of the 16–22 year olds on both restrictive availability measures and educational measures. According to the restrictive availability measures, the model explained a significant amount of variance ($R^2=.237$, Adjusted $R^2=.192$, $F(14, 239)=5.296$, $p=.000$). All three dummy variables of alcohol use significantly predicted the opinion of restrictive availability measures negatively, indicating that alcohol consumption influences the opinion on availability measures. The educational measures were not predicted by the model as showed in Table 4. The model presented did not explain a significant amount of variance ($R^2=.056$, Adjusted $R^2=.001$, $F(14, 239)=1.013$, $p=.441$). However, age was significant, indicating that 19 to 22 years olds were more positive about educational measures than the 16 to 18 year olds.

Discussion

The aim of this study was to explore the opinion of the 16–22-year olds on measures that restrict the availability of alcohol and educational measures that aim to prevent adolescents drinking heavily, compared to the opinion of adults (> 22 years) on these measures. This study indicates that the 16–22-year olds were less positive about restrictive availability measures and educational measures than adults (> 22 years), and that alcohol consumption seems to be the strongest predictor of the opinion on restrictive availability measures.

Measures restricting the availability of alcohol were not popular among either the 16–18-year olds or the 19–22-year olds. The adolescents disagree more with the restrictive availability measures than with the educational measures. Regarding the restrictive availability measures, the adolescents disagree most with prohibiting alcohol and banning the sale of any alcoholic beverages in supermarkets. However with an 25% price increase, young European citizens in general would buy fewer alcoholic beverages than the EU average [5]. This might indicate that although young people disagree with these kinds of restrictive measures, they would probably buy fewer alcoholic beverages if prices increase. In contrast to the restrictive availability measures, educational measures to prevent adolescents drinking heavily were more popular. Comparing the adolescents' and young people's opinion on both types of measures with the opinion of adults, both types of measures are more popular among the adult population. This indicates that age seems to influence positively the opinion on alcohol policy measures. However, this finding is more applicable to the restrictive availability measures than to the educational measures.

The fact that educational measures are more popular than restrictive availability measures is in line with Giesbrecht and Greenfield, who reported that educational measures are popular among an adult population [8], which can also be concluded from our study. However, providing information and education, especially school-based education, is not effective in reducing alcohol-related problems [14, 20]. More effective measures to reduce alcohol consumption are raising the price of alcoholic beverages and restricting the sale of alcohol [14, 20–22], but these measures are relatively unpopular [8]. A possible reason why measures related to access to alcoholic beverages are unpopular could be that many people, i.e. all drinkers, are affected when these measures are introduced [3]. This assumption is in line with findings of Giesbrecht, Ialomiteanu & Anglin [10] and Giesbrecht & Greenfield [8] who found that the drinking pattern predicts views on some alcohol-related policy topics. This study underlines these conclusions.

One of the research questions was to explore predictors of the opinions of the 16–22-year olds on the restrictive availability measures and educational measures. Alcohol consumption seems to impact negatively the opinion on restrictive availability measures of the 16–22-year olds and appears to be the strongest predictor. This indicates that drinking negatively affects the opinion on restrictive availability

measures. This is in line with Giesbrecht, Ialomiteanu & Anglin and Giesbrecht & Greenfield [8, 10] who found that the drinking pattern predicts views on some alcohol related policy topics and showed that, in particular, the level of consumption has the greatest explanatory power among an adult population. According to the respondents who never drink alcohol and served as a reference group, drinkers are more negative towards restrictive availability measures than non-users. Political preference, daily activity and urbanization rate do not seem to play any role. The opinion of the 16–22 year olds on educational measures are not explained by daily activity, gender, political preference, urbanization rate or being aged between 16 and 22 years. It seems that other factors might play a role in predicting the opinion of the 16–22-year olds. The fact that the opinion on educational measures could not be explained by these variables could be due to the fact that educational measures do not really affect people because everybody agrees with these kinds of measures.

From a political point of view, these results can be meaningful in directing policy measures to prevent adolescents drinking heavily. Knowing that alcohol use seems to predict the opinion on restrictive availability measures, intervening on alcohol use will target not only the alcohol use itself, but also their opinion on these measures. This assumes that it is important to focus on decreasing the prevalence of alcohol consumption among adolescents because it will also affect their opinion on restrictive availability measures.

There are some limitations to this study. The items are measured on a 5-point Likert scale and the third range was 'neither agree nor disagree'. This score can be rated as 'I do not know' or as a score between disagree and agree. This might bias the opinion scores. In this study this category is interpreted as a score between agree and disagree, but it is not certain how the respondents interpreted this category. Another limitation is the design of the study. It is a cross-sectional survey and therefore nothing can be said about causality. Also selective non-response could cause a problem when examining alcohol consumption in a survey [23, 24], as is done in this survey. Besides that, the alcohol consumption is based on self-reporting, which means that the amount of drinking is not necessarily the true amount of alcohol consumed. Despite this concern, self-reported questionnaires tend to give better valid data than interviews in which respondents have to give their answers verbally [25]. Regarding the scale to interpret the opinion on educational measures, it consisted of only two items which is relatively low. As the Cronbach's alpha was above 0.7, the scale has been used to calculate a general score of the opinion on educational measures. Finally, this study examined the opinion on restrictive availability measures and educational measures to decrease alcohol consumption. This does not cover the opinion on alcohol policy in general. Therefore it is worthwhile to investigate the opinion of adolescents on alcohol policy measures further.

Conclusions

Based on the results of this study the two hypotheses can be confirmed; the adolescents are more negative towards restrictive availability measures and educational measures than adults, and the restrictive availability measures are less popular than the educational measures among adolescents.

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The opinion on Dutch cannabis policy measures

Based on: van der Sar, R, Brouwers, EPM, van de Goor, LAM, Garretsen, HFL. The opinion on Dutch cannabis policy measures: A cross-sectional survey. *Drugs: Education, Prevention, and Policy* 2011; 18(3), 161-171.

Abstract

Aims: The aim of this study was to examine the opinion on Dutch cannabis policy measures and to explore whether the popularity of these policy measures depends on the extent to which lay people are affected by these measures. The extent to which people are affected has been made operational by: 1. own cannabis use and 2. cannabis use in social network.

Methods: A panel survey was carried out among a representative probability sample of households and consisted of 8,280 members of above 16 years. People's opinions were examined on four restrictive availability measures and two educational measures. Descriptives, one-way ANOVA and regression-analysis were used to obtain the opinion on cannabis policy measures.

Results: The educational measures were popular among more than 90% of all respondents. The measures that restrict the availability of cannabis were more popular among non-users than among users. Having cannabis users within a social network made a significant difference to the opinion on cannabis policy measures. Own cannabis use seems to be the strongest predictor for the opinion of restrictive availability measures.

Conclusions: The opinion of a cannabis policy measure depends on whether one is affected by that policy measure.

Introduction

The Dutch drug policy is considered liberal compared to that of many other countries. While in many countries drug prohibition is enforced by the police and the military, in the Netherlands there is an attempt to administer, decriminalize and regulate cannabis sales [1]. The Dutch drug policy consists of several characteristic elements. Firstly, it is based on the normalization principle [2] suggesting that it is not possible to ban totally the use of drugs with strict and stringent policy measures [3]. Instead, it is considered far more realistic to focus on harm caused by the use of drugs [4]. Secondly, the Dutch drug policy differentiates between cannabis policy measures (soft drugs) and hard drug policy measures. Cannabis use is tolerated under specific conditions and circumstances, but the use of hard drugs is punishable [5]. Other additional elements are controlling measures such as controlled access for the sale of cannabis, harm reduction, well-organized addictive care and educational measures.

This drug policy has been part of Dutch culture for years and a majority of the population seemed to agree with the existence of coffee shops as a place for selling cannabis, as long as no nuisance is caused by the coffee shops or their customers [6]. However, problems related to drug use occur. These problems are caused by the organized crime behind the cannabis production [7], foreign trading, especially in cities at the country border [6], criminal offences committed by customers of coffee shops [7] and the physical and psychological damage by using cannabis regularly, especially among youngsters [8–11]. These negative effects were reasons for the Dutch government to evaluate the national drug policy recently. In line with this evaluation it is of interest to know the public opinion on cannabis use as it is easily available through coffee shops. As cannabis use is most problematic among youngsters, the opinion on educational measures and the restriction of the availability of cannabis is especially relevant.

Public opinion on cannabis use has not been studied thoroughly in the Netherlands. Although cannabis is seen as the least harmful drug compared to other kinds of illicit drugs [12], effective policy is needed to minimize its harmful effects. Knowing the public opinion on cannabis policy can help to direct policy and to make it more effective. Moreover, the potential influence of a policy measure seems to increase if the public supports its implementation [13]. Furthermore, if policies would like to have an effect then these policies should be sensitive to several sources of information, gained from scientific evidence and responding to the opinion and needs of the population [14].

Research on public opinion on cannabis-related policy measures is rather limited. Some studies have been conducted in Norway [15] and Australia [16, 17]. Skretting [15] found a high degree of public support for policy that prohibits all associations with drugs among the Norwegian population. This was in contrast to Lenton & Ovenden [17] and Fetherston & Lenton [16] whose data indicated considerable support for decrimi-

nalizing simple cannabis offenses among the Western Australian population. However, more research has been done on public opinion on alcohol related policy measures. For example, health education measures such as mass media campaigns and school-based programs with regard to alcohol use are popular measures among lay people [18] but their effectiveness in decreasing alcohol consumption is small [19–21]. Increasing price and restricting the sale of alcoholic beverages (availability) are effective measures [19–21] but fairly unpopular [18].

A possible reason why measures related to access to alcoholic beverages are unpopular could be that many people, i.e. all drinkers, are affected when these measures are introduced. It is therefore understandable that one's own alcohol consumption is the strongest predictor of the opinion on some topics of alcohol policy [18, 22].

This phenomenon of being affected by policy measures and the influence on individuals' opinion could be explained by rational choice models of economic self-interest [23]. It refers to the motivational basis of one's choices [24]. Citrin and Green [24] suggested that, at an individual level, this model proposes that citizens prefer policies from which they, their close friends or family benefit. This role of self-interest becomes more important if the personal consequences of a choice become visible, tangible, large and certain [24] and when there is an interplay between the salience of an issue, the role of self-interest on preferences and the personal costs of a policy [25]. This interplay has been found in relation to public opinion on smoking restrictions and cigarette taxes [25]. In this present study, this rational choice model of economic self-interest was used as a possible underlying assumption for explaining the opinion on Dutch cannabis policy measures. Regarding the opinion on cannabis policy measures as examined in this study, it is expected that cannabis users as the ones who are most affected by restrictive measures are most negative to these measures. As the benefits for friends and family regarding the cannabis policy measures also may play a role in whether people feel affected, social environment was explored by estimating the use of cannabis in the social environment of the respondents.

In summary, the aim of this study is to examine the public opinion on Dutch cannabis policy measures and to explore whether the popularity of these policy measures depends on the extent to which lay people are affected by these policy measures. The extent to which people are affected has been operationalized by: 1) own cannabis use and 2) cannabis use in the social network.

It is expected that the relation between consumption and the popularity of a measure as described for alcohol consumption, could be applied to cannabis use as well. Measures that restrict the availability of cannabis would therefore be more popular among non-cannabis users than among cannabis users. As educational measures do not affect users or non-users negatively, the opinion of the user and non-users regarding these measures will not differ much. To examine these hypotheses four research questions were formulated: 1) What is the public opinion on cannabis policy measures that restrict the availability of cannabis and on educational measures

with regard to cannabis use in the Netherlands? 2) Do cannabis users have different opinions on policy measures regarding cannabis use than lifetime users and non-users? 3) Do people with (problem) cannabis users in their social network have a different opinion on policy measures regarding cannabis use than people who do not have (problem) cannabis users in their social network? 4) Is own cannabis use, compared to a variety of other variables, the most important predictor for the opinion on policy measures with regard to the use of cannabis?

Methods

Sampling and data collection

This cross-sectional survey was conducted in November 2008. Data was collected by an internet survey using a Dutch panel (Longitudinal Internet Studies for Social sciences, LISS) administered by CentERdata. This representative panel of the Dutch population received online questionnaires monthly. Panel members who completed online questionnaires received a monthly incentive. To establish the panel, a simple random sample of 10,150 addresses was drawn from an address frame of Statistics Netherlands, using a random 10% sample from the population registers each year. These households received a letter with an invitation to participate. All members of the households in the sample were asked to participate. Next, respondents were contacted by an interviewer in a mixed mode design. If a telephone number was available, the households were contacted by phone. If not, these households were visited and contacted face-to-face. The households were called 15 times as a maximum. When the households could not be reached by phone, face-to-face contact was recruited. In total, 5,000 households with 8,280 panel members were included in the LISS panel. Households that could not otherwise participate were provided with a computer and internet connection. For this study, an online questionnaire has been sent to all panel members. Two reminders were sent to the panel members to increase the response rate.

Questionnaire

A questionnaire was designed to examine the public opinion on drug policy and drug use. Topics that were assessed were acceptability, responsibility and parenting, social environment, alcohol and drug policy measures and social norms. Substance use, identifiable characteristics and political preference were also assessed, as well as demographic variables like gender, education level, age, family conditions, year of birth, most important daily activity, number of children in the family and urban population density. Statements were assessed on a five-point Likert scale and a seven-point

Likert scale. The five-point Likert scale was categorized into totally disagree '1', disagree '2', neither agree nor disagree '3', agree '4' and totally agree '5'. The seven-point scale was ranged from totally disagree '1' to totally agree '7'. Lifetime prevalence and recent use of alcohol, tobacco, and illicit drug use were both assessed. Recent use in last 30 days was assessed in five categories: 'on average 6–7 days a week', 'on average 2–5 days a week', 'on average 1 day a week', 'on average less than 1 day a week' and 'did not use'. Whether respondents had cannabis users and/or problem cannabis users in their social network was asked in several questions 'Do you have friends or family members who used cannabis', 'Do you know somebody else who used cannabis', and 'Do you have people in your social network of whom you think that their cannabis use is a problem'?

Statistical analyses

The data was analysed using SPSS 17.0. Missing values were excluded pairwise, indicating that the respondents' opinion has been excluded only if data required for the specific analysis was missing. Descriptives were used to explore the public opinion on cannabis policy measures. One-way ANOVAs were conducted to explore the impact of cannabis use on the opinion of measures that restrict the availability of cannabis and on educational measures regarding cannabis use. Tukey HSD was used as post-hoc test with a significance level of 0.01. To examine the differences between cannabis users and non cannabis users, respondents were divided into three groups according to their cannabis use. Group 1 had used cannabis during the last 30 days (recent users), group 2 had used cannabis but not during last 30 days (lifetime users), and group 3 had never used cannabis (non-users). To indicate the impact of social influence by having cannabis users in their social network or not, the respondents were also divided in three groups: (1) respondents having no users and no problem users in their social network, (2) respondents having users but no problem users in their social network and (3) respondents having users and problem users in their social network. To interpret the effect size of the significance differences the eta-squared were calculated. According to Cohen [26] 0.01 is classified as a small effect, 0.06 as a medium effect, and 0.14 as a large effect. Games-Howell was used as post hoc test.

Six multiple regression analyses were conducted to assess the relationship between cannabis use and opinion. In each analysis, the opinion on one of the six policy measures was the dependent variable. The model was controlled for gender, age, urbanization rate, education level, cannabis use, having cannabis users in the social network, political preference and smoking habits. The dependent variable was measured on a five-point Likert scale and treated as quasi-interval in multiple regression analysis [27]. As the sample size was large and analysis of variance and regression are robust techniques, normality was not a matter of concern. The assumption of linearity was not relevant for our analyses, since none of our predictors was treated as a con-

tinuous variable. Although homoscedasticity was now and then rejected, the differences between the variances were so small that they hardly could affect our results. [28]. Dummy coding was used to convert the categorical independent variables into dummy variables. Respondents belonging to a particular category were assigned a code 1. All other respondents in this category were coded as 0. In total, five dummy's were created for age categories (25–34 years, 35–44 years, 45–54 years, 55–64 years, > 65 years), three for political preference (left-wing, centre/ christian-democratic, conservatives), five for education level (primary education, pre-vocational secondary education, senior general education/ pre-university education, secondary vocational education, higher professional education), two for cannabis use (recent user, lifetime user), two for the social network (having cannabis users and problem users in the social network, having cannabis users in the social network but no problem users) and two for smoking habits (smoked recently, not smoked recently). Men were coded as 1.

Measurements

For this study the respondents' opinion was assessed on six policy measures. Respondents could rate their opinion on a five-point Likert scale: four measures concerned the availability of cannabis and two concerned educational measures with regard to cannabis use. These were the dependent variables and are described in Table 1. The independent variables were the extent to which respondents had cannabis users in their social network, self-reported cannabis use, smoking habits, political preference and the background variables, education level, gender, age, cannabis use and urbanization rate.

Results

Socio-demographic variables

For this survey all panel members (N=8,280) received an online questionnaire. The non-response was 32.8%. In total 5,616 respondents were included in this study. Table 1 presents the socio-demographic variables of the 5616 respondents.

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Table 1: Demographic variables

	Valid N	%
<i>Age</i>		
Min age	16	
Max age	95	
Mean age (SD)		46.7 (±16.3)
<i>Gender</i>		
Men	2571	45.8
Women	3045	54.2
Total Valid N	5616	100
<i>Age groups</i>		
15–24	643	11.4
25–34	749	13.3
35–44	1094	19.5
45–54	1164	20.7
55–64	1150	20.5
>65	816	14.5
Total Valid N	5616	100
<i>Marital status</i>		
Single/ widow	858	15.3
(Un)married living together without children	2071	36.9
(Un)married living together with children	2363	42.1
Single/ widow with children	273	4.9
Other	51	0.9
Total Valid N	5616	100
<i>Education*</i>		
Primary education	585	10.4
Pre-vocational secondary education	1484	26.4
Pre-university education	611	10.9
Secondary vocational education	1292	23.0
Higher professional education	1229	21.9
University education	415	7.4
Total Valid N	5616	100
<i>Urbanization of place of residence**</i>		
Very much urbanized (>2500)	724	12.9
Much urbanized (1500 to 2500)	1468	26.1
Moderate urbanized (1000 to 1500)	1276	22.7
Less urbanized (500 to 1000)	1265	22.5
Not urbanized (< 500)	883	15.7
Total Valid N	5616	100
<i>Prevalence cannabis use</i>		
Recent user	184	3.3
Lifetime user	1056	19.0
Non user	4312	77.7
Total Valid N	5552	100

The opinion on Dutch cannabis policy measures

	Valid N	%
<i>Smoking habits</i>		
Smoker	1398	25.2
Lifetime smoker	2307	41.5
Non-smoker	1849	33.3
Total Valid N	5554	100
<i>Political preference</i>		
Left-wing	1422	25.3
Central/christian-democratic	1255	22.3
Conservatives	897	16.0
Don't know	1191	21.2
Total Valid N	4765	100
<i>Cannabis use in social network</i>		
No cannabis users and problem cannabis users in social network	1971	36.1
Cannabis users in social network but no problem users	2801	51.3
Cannabis users and problem cannabis users in social network	690	12.6
Total Valid N	5462	100

* Ministry of Education Culture and Science [31]

** Density of addresses in surroundings per m²

Opinion on Dutch cannabis policy measures

Generally all respondents agreed with the policy measures. Only the opinion on the sale of cannabis in coffee shops and the opinion on the prohibition of cannabis were mixed; about 40% agreed, about 40% disagreed and 20% neither agreed nor disagreed on both measures. Most respondents agreed that coffee shops should not be located near secondary schools (86%), that the government should monitor the sale of cannabis to people younger than 18 years (90%), that drug education campaigns should be conducted (91%) and that schools should provide drug education (93%).

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Table 2: Descriptives regarding availability of cannabis use and educational measures (1=totally disagree to 5=totally agree)

Level of agreement on	Mean (SD)	% Disagree	Nor agree/ nor disagree	Agree
<i>Availability measures</i>				
It should be permitted to sell cannabis in coffee shops	2.83 (± 1.30) n=5571	41.7	19.4	38.5
Coffee shops should not be located in the vicinity of secondary schools	4.24 ($\pm .92$) n=5578	5.8	8.8	85.5
The government should actively monitor whether coffee shops sell cannabis to people younger than 18 years	4.27 ($\pm .79$) n=5575	3.5	7.0	89.5
Cannabis use should be prohibited	3.06 (± 1.33) n=5579	39.9	20.2	40.0
<i>Educational measures</i>				
The government should conduct drug education campaigns	4.28 ($\pm .69$) n=5574	1.6	7.1	91.3
The government should ensure that schools provide drug education	4.31 ($\pm .68$) n=5560	1.4	6.0	92.6

Differences between recent users, lifetime users, and non-cannabis users

As can be seen in Table 3, the recent users, lifetime users, and non-users supported the proposed measures with two exceptions. First, recent and lifetime users agreed with the permission to sell cannabis in coffee shops whereas non-users scored neutral (do not agree/ do not disagree). Secondly, recent users and lifetime users disagreed with the prohibition of cannabis use, whereas non-users scored neutral. These differences between the opinions of the three groups were also the most powerful ones. The eta-squared of these measures were respectively 0.16 and 0.19. A smaller effect of the eta-squared was calculated for the other availability measures and the educational measures. The eta-squared of these outcomes varied between 0.0035 and 0.03.

Table 3: Means and statistical tests for ANOVA of respondents' opinion on availability and educational policy measures of users, lifetime users, and non-users (1=totally disagree to 5=totally agree)

	Recent user	Lifetime user	Non user	F (df)	p
<i>Availability measures</i>					
It should be permitted to sell cannabis in coffee shops	4.31 (± 0.84) ^{bc} n=183	3.69 (± 1.04) ^{ac} n=1053	2.55 (± 1.23) ^{ab} n=4297	539.07 (2, 5530)	0.00
Coffee shops should not be located in the vicinity of secondary schools	3.59 (± 1.03) ^{bc} n=183	4.01 (± 0.89) ^{ac} n=1054	4.33 (± 0.91) ^{ab} n=4304	98.95 (2, 5538)	0.00
The government should actively monitor whether coffee shops sell cannabis to people younger than 18 years	3.83 (± 0.98) ^{bc} n=183	4.11 (± 0.82) ^{ac} n=1054	4.34 (± 0.76) ^{ab} n=4302	67.38 (2, 5536)	0.00
Cannabis use should be prohibited	1.54 (± 0.71) ^{bc} n=183	2.06 (± 1.02) ^{ac} N=1054	3.37 (± 1.25) ^{ab} n=4306	667.06 (2, 5540)	0.00
<i>Educational measures</i>					
The government should conduct drug education campaigns	3.93 (± 0.88) ^{bc} n=183	4.18 (± 0.67) ^{ac} n=1052	4.32 (± 0.68) ^{ab} n=4302	41.46 (2, 5534)	0.00
The government should ensure that schools provide drug education	4.16 (± 0.67) ^c n=183	4.26 (± 0.02) ^c n=1052	4.33 (± 0.69) ^{ab} n=4289	9.78 (2, 5521)	0.00

Means within each category with different subscripts were significantly different at $\alpha < 0.01$ on post hoc tests.

Opinion and social network

The opinion on the policy measures of respondents who had cannabis users in their social network did not differ much from respondents who had not. However, regarding the opinion on the permission to sell cannabis in coffee shops, the respondents who had no users in their social network disagree with this policy measure while the respondents who had (problem) cannabis users in their social network had a more neutral opinion. With regard to the prohibition of cannabis use, the respondents who had no (problem) cannabis users in their social network agreed with this policy measure while those who did, had a more neutral opinion.

As can be seen in Table 4, significant differences were found on all six policy measures between the three groups except for the opinion on providing drug education in schools. The eta-squared according the policy measures varied from 0.0001 to 0.1381. The eta-squared for the permission to sell cannabis in coffee shops and for the

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prohibition on cannabis use were respectively 0.112 and 0.1381. All other effect sizes were small.

Table 4: Means (standard deviations) and statistical tests for ANOVA of respondents' opinion on availability and educational policy measures of respondents with no cannabis users nor problem users in social network, respondents with cannabis users but no problem users in social network and respondents with cannabis users and problem users in social network (1=totally disagree to 5=totally agree)

	(1)	(2)	(3)	F (df)	p
<i>Availability measures</i>					
It should be permitted to sell cannabis in coffee shops	2.25 (± 1.13) ^{bc} n=1963	3.16 (± 1.25) ^a n=2794	3.17 (± 1.37) ^a n=687	345.67 (2,5541)	.00
Coffee shops should not be located in the vicinity of secondary schools	4.36 ($\pm .92$) ^{bc} n=1968	4.18 ($\pm .90$) ^a n=2794	4.13 ($\pm .97$) ^a n=690	26.98 (2,5449)	.00
The government should actively monitor whether coffee shops sell cannabis to people younger than 18 years	4.34 ($\pm .75$) ^c n=1968	4.21 ($\pm .81$) ^a n=2793	4.31 ($\pm .77$) n=690	16.82 (2,5447)	.00
Cannabis use should be prohibited	3.70 (± 1.15) ^{bc} n=1968	2.67 (± 1.26) ^a n=2796	2.70 (± 1.33) ^a n=689	436.64 (2,5450)	.00
<i>Educational measures</i>					
The government should conduct drug education campaigns	4.32 ($\pm .73$) ^{bc} n=1963	4.22 ($\pm .75$) ^a n=735	4.22 ($\pm .73$) ^a n=689	6.98 (2,5445)	.00
The government should ensure that schools provide drug education	4.32 ($\pm .73$) n=1963	4.33 ($\pm .69$) n=734	4.33 ($\pm .66$) n=689	0.46 (2,5433)	.63

Means within each category with different subscripts were significantly different at $p < 0.01$ on post hoc tests

(1)=No cannabis users or problem cannabis users in social network

(2)=Cannabis users but no problem users in social network

(3)=Cannabis users and problem users in social network

Prediction of the opinion on availability measures and educational measures

For each measure the model explained a significant amount of variance. The outcomes of the permission to sell cannabis and the outcomes of the prohibition of cannabis use are shown in Table 5. These measures explained the greatest amount of variance, respectively 23.1 % for the permission to sell cannabis (adjusted $R^2=.231$,

$F(24,4651)=59,603$, $p=.000$) and 27.9% regarding the prohibition of cannabis use (adjusted $R^2=0.279$, $F(24,4651)=76,436$, $p=.000$). As can be seen in Table 5, opinions on the sale of cannabis became more positive when respondents have used cannabis themselves and when respondents had no problem cannabis users in their social network. A similar effect was found for the prohibition of cannabis use: Life time users and respondents with cannabis users in their social network were more negative. The opinion on the sale of coffee shops got more negative by increasing age. This effect was the same regarding the prohibition of cannabis although this relationship was positive. Subjects with lower education levels were more negative about the sale of cannabis within coffee shops. Regarding the prohibition of cannabis use, this measure was more popular in subjects with lower education levels. Living in a non-urbanized, or an urbanized or weakly urbanized setting had only a weak impact on respectively the sale of cannabis and the prohibition of cannabis use. The same finding was found for smoking habits and the opinion on prohibition.

Table 5: Results multiple regression analysis predicting respondents' opinion on the permission to sell cannabis in coffee shops

Policy measures	independent variables	B	SE	β	t	p
It should be permitted to sell cannabis in coffee shops n=4675	<i>Age groups</i>					
	Dummy 25–34 y	-.098	.071	-.026	-1.372	.170**
	Dummy 35–44 y	-.191	.066	-.058	-2.899	.004**
	Dummy 45–54 y	-.209	.066	-.065	-3.191	.001**
	Dummy 55–64 y	-.286	.067	-.089	-4.240	.000**
	Dummy > 65 y	-.367	.072	-.100	-5.065	-.000**
	<i>Urbanization rate</i>					
	Dummy strong urbanized	-.060	.057	-.020	-1.039	.299
	Dummy urbanized	-.089	.059	-.029	-1.512	.131
	Dummy weak urbanized	-.092	.059	-.029	-1.528	.127
	Dummy not urbanized	-.126	.064	-.035	-1.964	.005**
	<i>Education level</i>					
	Dummy primary education	-.276	.084	-.065	-3.277	.001**
	Dummy pre-vocational	-.321	.073	-.109	-4.388	.000**
	Secondary education					
	Dummy pre-university education	-.076	.083	-.018	-.923	.356
	Dummy secondary vocational education	-.270	.073	-.088	-3.712	.000**
	Dummy higher professional education	-.068	.072	-.022	-.952	.352

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Policy measures	independent variables	B	SE	β	t	p
Cannabis use should be prohibited n=4675	<i>Cannabis use</i>					
	Dummy recent user	1.370	.101	.189	13.522	.000**
	Dummy life time user	.767	.050	.232	15.345	.000**
	Gender	-.023	.035	-.009	-.660	.509
	<i>Social network</i>					
	Dummy cannabis use and problem use	.343	.059	.088	5.830	.000**
	Dummy cannabis use and no problem use	0.525	0.040	0.202	13.76	.000**
	<i>Political preference</i>					
	Dummy left-wing	.245	.047	.086	5.241	.000**
	Dummy central/christian democratic	-.157	.048	-.053	-3.243	.001**
	Dummy conservatives	-.101	.052	-.030	-1.930	.053
	<i>Smoking habits</i>					
	Dummy smoked recently	.037	.049	.013	.753	.452
	Dummy not smoke recently	.026	.042	.010	.623	.534
	<i>Age groups</i>					
	Dummy 25–34 y	.170	.071	.044	2.402	.016*
	Dummy 35–44 y	.264	.065	.079	4.046	.000**
	Dummy 45–54 y	.289	.065	.088	4.457	.000**
	Dummy 55–64 y	.331	.067	.101	4.971	.000**
	Dummy > 65 y	.460	.072	.122	6.415	.000**
	<i>Urbanization rate</i>					
	Dummy strong urbanized	.084	.057	.028	1.486	.137
	Dummy urbanized	.133	.058	.042	2.272	.023*
	Dummy weak urbanized	.133	.059	.042	2.264	.024*
	Dummy not urbanized	.101	.063	.028	1.599	.110
	<i>Education level</i>					
	Dummy primary education	.591	.083	.136	7.113	.000**
	Dummy pre-vocational secondary education	.503	.072	.167	6.946	.000**
	Dummy pre-university education	.265	.082	.062	3.248	.001**
	Dummy secondary vocational education	.366	.072	.116	5.078	.000**
	Dummy higher professional education	.140	.071	.044	1.971	.049*
	<i>Cannabis use</i>					
	Dummy recent user	-1.403	.100	-.189	-14.014	.000**
	Dummy life time user	-.856	.049	-.253	-17.313	.000**

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Policy measures	independent variables	B	SE	β	t	p
	Gender	.053	.034	.020	1.534	.125
	<i>Social network</i>					
	Dummy cannabis use and problem use	-.357	.058	-.090	-6.137	.000 **
	Dummy cannabis use and no problem use	-.589	.039	-.222	-14.951	.000 **
	<i>Political preference</i>					
	Dummy left-wing	-.204	.046	-.070	-4.404	.000 **
	Dummy central/christian democratic	.144	.048	.048	3.017	.003 **
	Dummy conservatives	.100	.051	.030	1.948	.051
	<i>Smoking habits</i>					
	Dummy smoked recently	-.142	.048	-.047	-2.959	.003 **
	Dummy not smoke recently	-.122	.042	-.045	-2.915	.004 **

B=unstandardized coefficients, SE=Standard Error, β =standardized coefficients. * significant at $p<0.05$, ** significant at $p<0.01$

As can be seen in Table 5, left-wing or christian-democratic political preference impact the opinion on both measures weakly as well. As for the vicinity of coffee shops near schools, 5.3% (adjusted $R^2=0.053$, $F(24, 4651)=11.967$, $p=.000$) has been explained by the model, whereas for actively monitoring whether coffee shops sell cannabis to people younger than 18 years, 3.5% (adjusted $R^2=0.035$, $F(24, 4651)=8.055$, $p=0.000$) has been explained by the model. For conducting drug education campaigns, 3.8% of the variance was explained (adjusted $R^2=0.038$, $F(24, 4651)=8.663$, $p=.000$), and ensuring drug education programs in schools, 2.3% of the variance was explained (adjusted $R^2=.023$, $F(24, 4651)=5.577$, $p=.000$). In Table 6, only β 's are shown of these four regression models. With respect to the direction of the regression effects, age received positive β while cannabis use and gender impacted the opinion on these measures negatively. It indicates that the policy measures are more in favour by increasing age, that men are in less favour of these policy measures and that cannabis users are more negative about monitoring and conducting drug education at schools. Having cannabis users and problem users in one's social network was negatively associated with the opinion on providing drug education but positively associated to the opinion on monitoring. Lower education levels were only of importance for the opinion on conducting drug campaigns. As shown in Table 6, strong urbanized, weakly urbanized and not urbanized were positively associated with the opinion on the location of coffee shops not close to schools. Weak urbanized and strong urbanized were only positively associated on respectively the opinion on monitoring and conducting drug education campaigns. Smoking recently negatively impacted the opinion on all four policy measures, except for the opinion on monitoring the sale of cannabis

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to youngsters. In general, the significant β 's are rather weak, except for age which is the strongest predictor on all four policy measures as shown in Table 6.

Table 6: β policy measures and significance

Policy measures	A	B	C	D
	β	β	β	β
<i>Age groups</i>				
Dummy 25–34 y	.056**	.045**	.069**	.083**
Dummy 35–44 y	.124**	.062**	.123**	.147**
Dummy 45–54 y	.132**	.077**	.138**	.160**
Dummy 55–64 y	.154**	.077**	.141**	.142**
Dummy > 65 y	.152**	.108**	.150**	.127**
<i>Urbanization rate</i>				
Dummy strong urbanized	.061**	NS	.048**	NS
Dummy urbanized	NS	NS	NS	NS
Dummy weak urbanized	.075**	.044*	NS	NS
Dummy not urbanized	.059**	NS	NS	NS
<i>Education level</i>				
Dummy primary education	NS	NS	-.050*	NS
Dummy pre-vocational secondary education	NS	NS	-.071*	NS
Dummy Pre- university education	NS	NS	NS	NS
Dummy secondary vocational education	NS	NS	-.054*	NS
Dummy higher professional education	NS	NS	NS	NS
<i>Cannabis use</i>				
Dummy recent user	NS	-.091**	-.056**	NS
Dummy life time user	NS	-.093**	-.051**	NS
Gender	-.038*	-.036*	-.081**	-.077**
<i>Social network</i>				
Dummy cannabis use and problem use	NS	.053**	NS	-.077**
Dummy cannabis use and no problem use	NS	NS	NS	NS
<i>Political preference</i>				
Dummy left-wing	NS	NS	NS	NS
Dummy central/christian democratic	NS	NS	NS	NS
Dummy conservatives	NS	NS	NS	NS
<i>Smoking habits</i>				
Dummy smoked recently	-.064**	NS	-.042*	-.057**
Dummy not smoke recently	NS	NS	NS	NS

β =standardized coefficients, * significant at $p<0.05$, ** significant at $p<0.01$, NS=Not Significant

A=Coffee shops should not be located in the vicinity of secondary schools

B=The government should monitor whether coffee shops sell cannabis to people < 18 years

C=The government should conduct drug education campaigns

D=The government should ensure that schools provide drug education

Discussion

The objective of this study was to examine the opinion on Dutch cannabis policy measures and to explore whether the popularity of policy measures with regard to the use of cannabis depends on the extent to which lay people are affected by these policy measures. This study showed that > 85% of the respondents agreed with the cannabis policy measures, except for the permission to sell cannabis in coffee shops and the prohibition of cannabis use. Here the opinion was mixed. The differences in opinion of the recent cannabis users, lifetime users and non-users were most prominent for the permission to sell cannabis in coffee shops and the prohibition of cannabis use: Non-users supported this measure less than recent users and lifetime users. Respondents with (problem) cannabis users in their social network had a neutral opinion on the prohibition of cannabis use. Own cannabis use was a strong predictor for the opinion on permitting the sale of cannabis in coffee shops and for the opinion on the prohibition of cannabis use.

That own cannabis use predicts the opinion on cannabis policy measures strongly may seem obvious. However, this study shows also that other aspects such as gender, political preference, urbanization rate and smoking habits are not main predictors of the opinion on cannabis policy measures. Other studies about public opinion on cannabis policy measures indicate also that cannabis use history had a significant effect on respondents' opinion on the level of severity towards offences when using cannabis [16, 17]. Skretting [15] found that persons who used cannabis themselves and/or had friends who had used the drug were more liberal towards drug use. As for the substance of alcohol, consumption level had the greatest impact on public opinion due to alcohol policy measures [18]. The current study points in the same direction for the use of cannabis in relation to policy measures that restrict the availability of cannabis. This outcome might indicate that respondents, here users or people with cannabis users in their network feel badly done by these availability policy measures and therefore have a more negative opinion on these measures than people who do not feel disadvantaged. This might be seen as an effect of the influence of self-interest. This effect is also described by Wallin and Adréasson [29] in relation to alcohol use: 'Those who frequently consume alcohol do not favour strategies that might affect their own situation' [29]. However, caution is needed by making these interpretations. First, the rational choice models of economic self-interest are mentioned as a possible explanation of the patterns seen in the opinion of the respondents. This study only indicates that economic self-interest as part of the rational choice models might play a role according the opinion on cannabis policy measures. Hence, more extensive (e.g. qualitative) research is needed to give more insights in how self-interest acts according the rational choice theory in relation to cannabis policy measures. Second, the rational choice models have also been criticized. According to this theory people seek to

maximise their own profits based on only rational thoughts [30]. That people often act impulsively, emotionally or forced by a habit is ignored [31].

In contrast to the opinion on availability measures, the opinion on educational measures is more unanimous. These results are in line with a study by Room et al. [32] who found support for alcohol counter-advertising by the government. Although this finding is based on the opinion on alcohol educational measures, the opinion on these measures seems similar for both substances.

Out of the six policy measures, two restrictive availability measures and two educational measures explained only a small percentage of variance indicating that the model did not fit well for these policy measures. A reason for this finding could be that most respondents agreed with these policy measures, since these measures focus on the prevention of cannabis use among teenagers which is generally supported by most adults. The scores might have been different if these questions have been asked to teenagers themselves. The results show that these measures get more popular by increasing age, so younger people would be probably less in favour of these measures. The finding that no strong predictors were found for these opinions on these policy measures is rather more a matter of the selected policy measure than that other not included predictors in the model might have played a role.

Before turning to the conclusions, some limitations need to be pointed out. First, the regression analysis showed that more than 900 respondents were not included in the regression-analysis. A non-response analysis showed that 81% of non response was caused by missing values on political preference. This was caused by the fact that four categories were defined as missing ('I would not vote', 'I am not able to vote', 'I do not vote on the parties mentioned here', 'I vote blanco'). Second, it must be taken into consideration that, in general, the significant differences between the groups according to their opinion on the measures are small. A third limitation of this study is the cross-sectional design which does not permit us to do any utterances about causality or time-series effects. Another limitation is that the sample has not been weighted and as a consequence the findings can not be generalized to the whole Dutch population. Finally, self-reporting has been used to measure cannabis intake which may have caused bias.

Based on the results of this study, the outcomes suggest that the extent to which people are affected by a policy measure seems to determine the opinion on measures that restrict the availability of cannabis, as it does for alcohol. Measures that limit the availability of alcohol are less popular among users and lifetime users than among non-users. Having (problem) cannabis users in your social network also impacts the opinion on measures that limit the availability of cannabis, but less than own cannabis consumption. However, to fully understand the relation between the social network, cannabis use and the opinion of cannabis policy measures, longitudinal data is needed to explore this relationship further.

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7

Discussion

General discussion

To minimize the harmful effects of substance abuse for individuals and for the society, governments try to regulate substance use by creating policy measures [1]. These are not always popular among the general public, although support for these policy measures may improve their overall impact [2]. Therefore, on the one hand, studying policy opinion has the potential to help the public understand why some policy measures are implemented and, on the other, knowledge of public opinion helps policymakers to better understand the public.

Public support for alcohol and drug policy measures may differ across countries. To explore the relationship between opinions of citizens on substance use and related policy measures and national alcohol and drug policies, comparing data from different countries with different alcohol and drug policies is valuable. Therefore, this work explores the opinion of citizens on substance use, and alcohol and drug policy measures, as well as which factors influence this opinion. In particular, this study specifically focused on the opinions in two western European countries which differ in the strictness of their national alcohol and drug policies: the Netherlands and Norway. As described in the introductory chapter, although these countries have considerable differences in their alcohol and drug policies, from a socio-cultural perspective they are relatively similar.

To explore the opinion of citizens on substance use and alcohol and drug policy measures, and factors influencing this opinion, several research objectives were formulated. First, the differences between Norwegian and Dutch alcohol and drug policies offered the opportunity to investigate the factors that influence the opinion of citizens and whether these opinions in the Netherlands and Norway differed on several topics (Chapters 2, 3 and 4). Second, examining the opinion within a country, in this case the Netherlands, helps to unravel the opinions on policy measures that are characteristic within a specific country, in this thesis the Dutch cannabis and alcohol policy (Chapters 5 and 6).

Therefore, the following research objectives were formulated for this thesis:

1. To examine the opinion of Norwegian and Dutch adults on alcohol policy measures that may prevent young people from problematic drinking.
2. To investigate whether Norwegian and Dutch parents differ in their perceptions on parental measures, and how parents view governmental responsibility to prevent adolescents from substance use.
3. To explore differences between Norwegian and Dutch adults in their level of acceptance of illicit drug use, and to explore influences on the level of acceptance.
4. To assess the opinion of 16-22-year olds on alcohol policy measures compared to the opinion of adults older than 22 years.

5. To examine the opinion of Dutch adults on Dutch cannabis policy measures and to explore whether the popularity of these policy measures depends on the extent to which lay people are affected by these measures.

This discussion chapter starts with an overview of the main findings in relation to the research objectives as described above. Then a reflection on the main findings is given and methodological considerations are described followed by recommendations for future research. The chapter ends with some implications for policy emerging from the work presented in this thesis, and a final conclusion.

Main findings

In relation to the opinion of Dutch and Norwegian adults on alcohol policy measures that may prevent young people from problematic drinking, Dutch as well as Norwegian adults were more positive about educational (i.e. school education programs and alcohol campaigns) than restrictive measures (i.e. increasing the price of alcoholic beverages, banning the sale of alcoholic beverages from supermarkets, banning the sale of alcopops from supermarkets, prohibition on alcohol advertisement, prohibition of happy hours, no sale of alcoholic beverages at places where young people < 16 years gather) that may prevent young people from problematic drinking (Chapter 2). Most adults had some reservations about the restrictive measures. Dutch and Norwegian adults differed most in their support regarding the sale of any alcoholic beverages, and the sale of alcopops in supermarkets, i.e. the Dutch were more opposed to restricting these sales than the Norwegians. Other differences between the Dutch and Norwegians on the restrictive and educational measures were small. However, the restrictive and controlled measures are already an important part of Norwegian alcohol policy, because Norwegian alcohol policy is more regulated compared with that in the Netherlands (also described in the introductory chapter). This should be borne in mind when interpreting these results. Support for the restrictive measures was explained by the same factors (i.e. gender, age and own alcohol use) in both the Norwegian and Dutch samples. Adults who drank moderately had the most negative opinion about the restrictive measures. Younger adults and men were also more negative about these measures than older respondents and women. Regarding educational measures, support was not strongly predicted by own alcohol consumption and demographic variables. Although Norway and the Netherlands have different alcohol policies, differences between the opinions on alcohol policy measures that may prevent young people from problematic drinking were small.

Similarly, in relation to the perceptions of Dutch and Norwegian parents on parental measures that may prevent young people from substance use and on how they view governmental responsibility to prevent this, differences between the perceptions of Dutch and Norwegian parents were small (Chapter 3). In general, compared with

Dutch parents, the Norwegian parents agreed more strongly with the need for parental measures. Both Dutch and Norwegian parents agreed that mainly the parents themselves, rather than the government, should be responsible for taking measures to prevent young people from substance use. They also indicated that parents should be pro-active in taking parental measures, and that these measures should be taken to prevent adolescents from substance use. In summary, parents from both countries felt a responsibility to prevent adolescents from substance use, despite differences in national alcohol and drug policies between the Netherlands and Norway. This finding provides an opportunity to increase the involvement of parents in interventions to prevent young people from substance use.

In contrast to the perceptions on parental measures and alcohol policy measures, differences between Dutch and Norwegian adults in their level of acceptance of illicit drug use were larger (Chapter 4). On average, the acceptance among Norwegian people was lower compared to the Dutch respondents, although both Dutch and Norwegian respondents had reservations about the acceptance of illicit drug use (cannabis, cocaine, heroin). However, it appeared that the Dutch are more likely to accept illicit drug use as a 'normal' part of the society than the Norwegians. In both countries, the level of acceptance of cannabis was greater than that of cocaine and heroin use. The level of acceptance was also measured among different user groups across Norway and the Netherlands. Regarding the non-users, Dutch non-users of cannabis, cocaine and heroin accepted illicit drug use more than Norwegian non-users; Dutch and Norwegian current cannabis users showed differences on only a few drug policy measures. Therefore, factors other than own illicit drug use may also be related to the level of acceptance of illicit drug use among Dutch and Norwegian respondents. This strengthens the idea that both the social and cultural accommodation are important contributors in defining the level of acceptance within societies.

Regarding the opinions of Dutch persons aged 16-22 years on alcohol policy measures compared with those older than 22 years, the younger group was less positive about restrictive availability measures and educational measures than the adults (Chapter 5). Own alcohol consumption was the strongest predictor of the opinion on restrictive availability measures. This indicated that the more a person drank, the more they disagreed with these measures. Besides own consumption also age was positively related to the opinion on alcohol policy measures. However, this finding was more applicable to the restrictive availability measures than to the educational measures. The adolescents showed stronger disagreement with the restrictive availability measures than with the educational measures. Comparing the opinions of the younger group on restrictive and educational measures with that of adults, both types of measures were more popular among the adult population.

Also with regard to the opinion of Dutch adults on Dutch cannabis policy measures, own cannabis use was a strong predictor for the opinion regarding permitting the sale of cannabis in coffee shops, and for the opinion on the prohibition of cannabis use

(Chapter 6). Differences between the opinions of the recent cannabis users, lifetime cannabis users and non-users, were most prominent in relation to the permission to sell cannabis in coffee shops and the prohibition of cannabis use: non-users were more negative about the permission to sell cannabis in coffee shops and more positive about the prohibition of cannabis use, than recent users and lifetime users. Respondents who had (problem) cannabis users in their own social network had a neutral opinion on the prohibition of cannabis use. The extent to which people are personally affected by a policy measure seemed to determine their opinion on measures that restrict the availability of cannabis. Measures that limit the availability of cannabis were less popular among recent users and lifetime users than among non-users. Own cannabis use seemed to be the strongest predictor for the opinion on the restrictive availability measures with regard to cannabis. Having (problem) cannabis users in one's own social network was also related to the opinion on measures that limit the availability of cannabis, but less so than own cannabis consumption.

Reflections on the main findings

The work in this thesis focused on the opinion of citizens on substance use, and alcohol and drug policy measures. In addition, factors that influence the opinion of citizens in the Netherlands and Norway were investigated. The target groups differed across the various chapters, and in three of the five chapters the opinion of Norwegian and Dutch respondents was compared. These two countries were chosen because of the differences in their level of strictness of their national alcohol and drug policies, which may be related to how the population perceives substance use and related policy measures.

Chapters 2 and 3 showed that the differences between the opinion of Dutch and Norwegian adults and parents were small regarding the opinion on policy measures that may prevent young people from problematic drinking (Chapter 2), and regarding the opinion on parental measures that may prevent young people from substance use (Chapter 3). That the difference in opinion on alcohol policy measures was small, is in contrast with the differences between the national alcohol policies in both countries; a larger difference between the Dutch and Norwegian opinions on the policy measures might have been expected. Also with regard to the parental measures, the fact that alcohol and drug policies are stricter in Norway than in the Netherlands did not seem to play a role; both Dutch and Norwegian parents feel the responsibility to take preventive measures. Therefore, it seems that alcohol and drug policies are not foremost in explaining the opinion on alcohol policy measures and the opinion on parental measures.

Nevertheless, own alcohol consumption and own illicit drug use showed a clear relation with the opinion on alcohol and drug policy and parental measures (Chapters 2, 3, 5 and 6). The amount of alcohol consumption and the frequency of the use of illicit

drugs is related to how Dutch and Norwegian respondents perceive substance use and related policy measures. In relation to the opinion on alcohol policy measures, other studies have also shown that own use is related to the opinion on alcohol policy measures, in particular in relation to restrictive or controlling alcohol policy measures [3-10].

However, apart from the influence of own consumption, other socio-cultural aspects may also play a role in explaining people's perspective on alcohol policy measures and parental measures: apart from the differences in policies, the differences between the Dutch and Norwegian opinions on alcohol policy and parental measures were small. If socio-cultural aspects had not played a role, then the differences between the opinions of Dutch and Norwegian respondents would have been more outspoken on these topics. Social and cultural factors may therefore play a larger role in opinion forming on policy and parental measures (Chapters 2 and 3).

Regarding the acceptance of illicit drug use among the Dutch and Norwegian population, the differences were larger (Chapter 4) than the differences between Dutch and Norwegian opinion and perceptions on alcohol policy measures and parental measures (Chapters 2 and 3). However, also for the acceptance of illicit drug use, own illicit use was the strongest influencing factor. Here also own use can not be the only factor related to how people perceive illicit drug use. This was shown by comparing the acceptance of illicit drug use between Dutch and Norwegian non-users. Non-users in both countries also differed in their acceptance of illicit drug use. This could only be examined through a cross-national comparison in which different user groups were compared; if own use was the only factor, then non-users in both countries would not differ from each other. This seems to be an additional finding in relation to Chapters 2 and 3. It seems that a more socio-cultural approach is needed to understand which other factors influence these opinions as well and to unravel the underlying processes.

In three chapters (Chapters 2, 5 and 6) a distinction was made between the opinion on educational policy measures and restrictive policy measures. Regarding these chapters, the educational measures were highly supported by the respondents, whereas they were less positive about restrictive measures. This pattern was shown for both alcohol and cannabis policy measures. Regarding the cannabis policy measures, this has not been studied previously. However, the regression models that were used to predict the opinion on educational measures did not explain the opinion very well, whereas the models to predict the opinion on restrictive policy measures did. Factors other than demographic factors and alcohol consumption and cannabis use may better explain the opinion on educational measures. Another explanation may be that the statistical variance was not large enough to identify predictable factors as almost everybody agreed with these measures.

That the restrictive measures had less support compared to the educational measures can be explained by the rational choice models of economic self-interest [13]. This refers to the motivational basis of one's choices [14, p2] (also described in Chapter 6). Citrin and Green suggested that, at an individual level, this model proposes that citizens prefer policies from which they, their close friends or family, benefit [14]. This role of self-interest becomes more important if the personal consequences of a choice becomes visible, tangible, large and certain [14, p2] and when there is an interplay between the salience of an issue, the role of self-interest on preferences and the personal costs of a policy [15]. This interplay has been found in relation to public opinion on smoking restrictions and cigarette taxes [15]. This theory was used to explain the opinion on restrictive cannabis policy measures (Chapter 6), but can also be adapted to explain the opinion on restrictive alcohol policy measures (Chapters 2 and 5): the restrictive measures affect the drinking population, which might be an explanation for the lower support of these measures compared to the educational measures. However, in these chapters the opinion on measures that may prevent in particular young people from drinking was investigated. This may be a reason for the not completely negative opinions on these restrictive alcohol policy measures, especially among the Dutch respondents.

Methodological considerations

Quantitative methods were used to address the research questions. The strengths and limitations are described in the previous chapters. An overview of the strengths and limitations of the chapters in this thesis is given below.

Study design

In this work a cross-sectional design was used; this design is most frequently used to examine public opinion [16]. The data collection within a cross-national design is both efficient and inexpensive compared to other study designs. However, a disadvantage is that cross-sectional studies can not depict any causal relationships. Nevertheless, a cross-sectional design provides the possibility to compare Dutch and Norwegian opinion more easily; the way of data gathering can be easily standardized, and comparisons between countries can easily be made [17]. In relation to exploring the opinion, this can be of more value than comparisons over time within the same country [2]. Although the cross-sectional study design precludes explaining any causal relationships, cross-national comparisons on this discipline are scarce, which increases the value of this study.

Cross-national comparison

Chapters 2, 3, and 4 of this thesis were cross-national comparisons. This has several advantages, e.g. differences in opinion between countries are expected to be larger than differences over time within a specific country [18]. Moreover, findings can be interpreted from another perspective and other issues can be explored. However, a disadvantage of cross-national comparisons is that people in different countries might interpret questions or statements in a different way [19].

Another methodological issue related to Chapter 2 is that some policy measures were implemented in one country but not in the other. This should be taken into account when interpreting the results. Standardization of policy opinion measures across country borders will provide researchers with better tools for policy analysis [20]. However, due to the large differences in national alcohol and drug policies between Norway and the Netherlands, this was not possible in the present work.

Study samples and questionnaire

First, regarding the demographics of the sample sizes, especially in the Norwegian sample, highly educated people were somewhat overrepresented. This is reported to be a disadvantage of web-based research [22-24]. As described in Chapter 4, analyses were conducted to control whether differences emerged between the acceptance of illicit drug use across the different education levels in the Norwegian sample. However, this was not the case. Also in Chapter 2, the findings were controlled for education level and differences still occurred even after controlling. Therefore, it seems that overrepresentation of higher educated respondents in the Norwegian sample did not bias the results to any important extent.

Second, the two study samples differed in response rate. Compared with the Dutch, the Norwegian response rate was relatively low; this is likely due to differences in the selection procedure. For example, in the Netherlands the respondents were already taking part in an existing panel providing participants with facilities and incentives, whereas in Norway there were no incentives and it was much easier for people to decline. Another explanation for the low response rate could have been selective non-response due to the question to report one's own alcohol consumption and illicit drug use.

With regard to the report on substance use, the self-report of alcohol and illicit drug use is not necessarily the true amount of alcohol consumed [10, 25] or the true amount of illicit drugs used. However, this would only be a matter of concern if it was assumed that that self-reporting differed between Dutch and Norwegian respondents. This was not expected to be the case. However, self-reported questionnaires do tend to give more valid data compared with interviews in which respondents have to provide answers verbally [26].

Implications for policy

The results emerging from this thesis imply that lay people are on average somewhat reserved about the restrictive measures that aim to prevent young people from problematic drinking. However, this also implies that the public does recognize the problems associated with youth drinking. In agreement with Tobin et al., approaching restrictive measures from the starting point that these measures protect youth against harmful effects may be a more acceptable way from which to launch alcohol policy reform [16]. Therefore, governments may consider implementing more restrictive measures, even when the actual support seems to be low.

A second implication is the active involvement of parents in interventions that target young people's substance use. Involving parents in these interventions, in particular alcohol intervention programs aiming at alcohol-specific parental rules, have shown to be effective [29-31]. Moreover, this work shows that Norwegian and Dutch parents agree that parents do have more responsibility to take measures to prevent their children from drinking and illicit drug use, than the government. Policymakers and field workers should be aware of this and develop effective interventions that aim at involving parents.

Another implication is that monitoring among citizens (e.g. once every few years) can reveal changing patterns in opinion on policy measures. Research on policy opinion remains important for those involved in both local and national public health, in the design of policy and prevention measures, and to gain support for promising alcohol policies [20].

Implications for further research

The results presented in this thesis have provided answers to the research objectives, but have also raised new questions. Studies on the underlying processes as to how and according to which factors (e.g. socio-cultural elements) public opinions are constructed are lacking, and remains an underdeveloped area [27]. These processes could not be fully determined in the present thesis; a more in-depth analysis will help elucidate which factors interact with opinions on substance use, and related policy and parental measures.

Regarding the opinion on educational policy measures, the models used did not provide a feasible explanation regarding these policy measures (Chapters 2, 5 and 6). More research is needed to explore how the opinion on these measures can be predicted, and which factors are related to the opinion on educational measures. Also, studies should focus on a more socio-cultural approach to explain opinions on educational measures. Also in relation to restrictive measures, a socio-cultural approach to explain the opinion may serve to better identify the aspects that influence this opinion. Inclusion of more socio-cultural variables may help unravel the dynamics of how these opinions are formed. A better understanding of the underlying mechanisms will con-

tribute to developing policy measures and preventive interventions that are more applicable to the public and, thereby, more effective.

Because the present study is cross-sectional in design, future research should include longitudinal monitoring of public opinion. In the present study, opinion was examined only once which precludes inferring any causal relationships. Longitudinal monitoring of the opinion on alcohol and illicit drug use, and related policy measures, will allow to follow changes in public opinion, especially when policy has been changed over the years. Moreover, causal relationships can then be examined and determined. Another argument for monitoring opinions over a longer period is that this may improve the effectiveness of policy measures. As described in the introduction, policy measures may then be better understood by the public and, knowledge about public opinion, particularly in relation to policy measures, will improve the effectiveness of these measures [2, 20, 28].

Conclusion

This thesis has provided insight into the opinion of citizens from Norway and the Netherlands on substance use and alcohol and drug policy measures, as well as the factors which influence this opinion. In particular, this study focused on the opinions in two western European countries which differ in the strictness of their national alcohol and drug policies: the Netherlands and Norway. This work shows that there is not a strong relationship between national alcohol and drug policy measures and the opinion on policy measures in both the Netherlands and Norway. Although own substance use was strongest related to the opinion regarding substance use and related policy measures, this factor is not sufficient to explain all variations in these opinions.

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Chapter 7

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Summary

Summary

Particularly in western societies, alcohol and drug policies have been developed to minimize the harmful effects of substance use. These policies can be more effective if they are supported by the general population. This work explores the opinions of citizens on substance use, alcohol and drug policy measures, and factors influencing these opinions in two western European countries which differ in the level of strictness of their national alcohol and drug policies: Norway and the Netherlands. These two countries were selected because their alcohol and drug policies show considerable differences, from a socio-cultural perspective they can be described as being relatively similar.

For the present study, various research objectives were formulated. First, differences between Norwegian and Dutch alcohol and drug policies provided the possibility to investigate factors that influence the opinions of their citizens on several topics, and whether these opinions differ between the two countries (**Chapters 2, 3, 4**). Second, opinions on alcohol and drug policy and factors of influence in the Netherlands were explored in more depth (**Chapters 5 and 6**).

Therefore, the research objectives formulated for this study were:

1. To examine the opinion of Norwegian and Dutch adults on alcohol policy measures that may prevent young people from problematic drinking.
2. To investigate whether Norwegian and Dutch parents differ in their perceptions on parental measures, and how parents view governmental responsibility to prevent adolescents from substance use.
3. To explore differences between Norwegian and Dutch adults in their level of acceptance of illicit drug use, and to explore influences on the level of acceptance.
4. To assess the opinion of 16–22-year olds on Dutch alcohol policy measures compared to the opinion of adults older than 22 years.
5. To examine the opinion of Dutch adults on Dutch cannabis policy measures, and to explore whether the popularity of these policy measures depends on the extent to which lay people are affected by these measures.

For this study data were collected by means of a cross-sectional internet survey that was conducted in November 2008 in both Norway and the Netherlands.

In Norway, the data were derived from a subsample of a web panel. Initially 5,998 households were selected and finally a total of 2,150 respondents were willing to participate in the survey. The non-response rate was 64%. In the Netherlands, an existing panel was used to collect the data. In total, 5,000 households with 8,280 panel members were included in this panel. Finally, 5,616 respondents participated in this Dutch study. The non-response rate was 33%. Both samples included respondents aged 16 years and older.

Chapter 2 describes the opinion of Dutch and Norwegian adults (aged >23 years) on alcohol policy measures that may prevent young people from problematic drinking. Their opinion was asked regarding restrictive alcohol policy measures and educational policy measures. Restrictive measures included increasing the price of alcohol, prohibition of the sale of alcoholic beverages and of alcopops in supermarkets, prohibition of alcohol use in general, banning alcohol advertisements and happy hours, and not selling alcohol on places where young people gather (e.g. sport canteens). Educational measures included alcohol education campaigns and school education programs in relation to drinking.

Both Dutch and Norwegian adults were more positive about the educational measures than about the restrictive measures that may prevent young people from problematic drinking. However, differences in the opinions related to these measures were small. In both countries, respondents that drank moderately (6-20 drinks a week) were most negative about the restrictive measures; younger adults and men were also more negative. Although Norway was stricter in their alcohol policies compared to the Netherlands, differences in opinions on alcohol policy measures that may prevent young people from problematic drinking were small.

In **Chapter 3** Dutch and Norwegian parents were asked about their perceptions on parental measures to prevent adolescents from substance use, and their views on governmental responsibility to prevent young people from substance use. Dutch and Norwegian parents were selected from the overall Dutch and Norwegian study samples. Parents' perceptions were examined by asking their perception on different parental measures regarding alcohol and drug use. Parental allowance regarding the use of alcohol, cannabis and other drugs was also examined, together with parental responsibility.

In both countries, parents agreed that they should be pro-active to prevent adolescents from substance use. They also had the perception that parents were more responsible for taking measures to prevent young people from substance use than the government. Differences between the perceptions of the Dutch and Norwegian parents were small. Both groups of parents agreed that parental measures should be taken to prevent adolescents from substance use. Parents from both countries felt a responsibility to prevent adolescents from substance use, which offers the opportunity to increase the involvement of parents in interventions to prevent young people from substance use.

Chapter 4 presents answers on the question to what extent illicit drug use has been accepted in Dutch and Norwegian society. To examine this, the normalization thesis was used as a framework. The thesis determines six dimensions that create a framework for exploring the normalization of illicit drug use, especially among youth. This chapter focuses on two dimensions of this thesis: the cultural and social accommoda-

tion of illicit drug use. This was examined among the Dutch and Norwegian general population, and among Dutch and Norwegian non-users and recent users. The social and cultural accommodation were made operational by examining beliefs about acceptance of illicit drug use, and opinions on some drug policy measures among the overall Dutch and Norwegian samples. Beliefs about the acceptance of illicit drug use were divided into i) the respondent's thoughts regarding the acceptance of drug use, and ii) what the respondents experienced as 'normal' in their society with regard to drug use. In addition, their opinion was asked about some policy measures.

Both Dutch and Norwegian citizens were reserved about the acceptance of illicit drug use, although the Dutch showed more acceptance toward illicit drug use than the Norwegians. The Dutch accepted illicit drug use more as a 'normal' part of the society. In both countries, cannabis use was accepted more than use of cocaine and/or heroin. In relation to the different user groups, Dutch non-users showed more acceptance toward illicit drug use than Norwegian non-users. This indicates that, besides their own use, other more socio-cultural factors are also related to the acceptance of illicit drug use.

Chapter 5 describes the opinions of adolescents (aged 16-22 years) and adults (> 22 years) on Dutch restrictive and educational alcohol policy measures that aim to prevent adolescents from drinking heavily. Restrictive measures included increasing the price, prohibition of the sale of alcoholic beverages and of alcopops in supermarkets, prohibition of alcohol use in general, banning happy hours, and not selling alcohol on places where young people gather. Educational measures included alcohol education campaigns and school education programs in relation to alcohol.

Among both adolescents and adults, the Dutch restrictive measures were less popular than the educational measures. Also, adolescents were more negative towards the restrictive measures than adults. Own alcohol use appeared to be the main predictor for the opinion on restrictive measures, indicating that the moderate drinker was most negative about the restrictive measures. In addition, age was positively related to the opinion on alcohol policy measures, especially regarding the restrictive measures.

Chapter 6 presents the opinions on Dutch cannabis policy measures among Dutch adults. In addition, it explores whether the popularity of these policy measures depends on the extent to which people are personally affected by these measures. Cannabis policy measures include availability measures, such as the permission to sell cannabis in coffee shops, location of coffee shops, governmental monitoring of the sale of cannabis to people younger than 18 years, and the prohibition of cannabis use. Other cannabis policy measures include educational measures such as drug education campaigns and school education programs. The extent to which people were affected

was operationalized by own cannabis use and cannabis use in one's own social network.

Educational measures were very popular. Measures that restricted the availability of cannabis were more popular among cannabis users than among non cannabis users. Having cannabis users within one's social network made a difference about how one thought about cannabis policy measures. Own cannabis use seems to be the strongest predictor with regard to the opinion on availability measures with regard to cannabis. This implies that the opinion depends on whether or not one is personally affected by that policy measure.

Chapter 7 summarizes and appraises the main findings, and also discusses the strengths and limitations of this work, together with implications for policy and further research.

This thesis focused on the opinions of citizens regarding substance use and alcohol and drug policy measures, and which factors influence this opinion in the Netherlands and Norway. From this work three main points of interest emerge.

First, differences between the opinions of Dutch and Norwegian citizens on alcohol policy measures that may prevent young people from problematic drinking, and differences between the perception of Dutch and Norwegian parents on parental measures that prevent adolescents from substance use, were small. Thus, it seems that the level of strictness of a country's alcohol and drug policy is not the main explanation in determining the opinion of citizens on alcohol policy measures and on parental measures; social and cultural factors may play a larger role in the opinion on policy measures.

Second, differences between Dutch and Norwegian adults on the acceptance of illicit drug use were larger compared to the differences between the opinion of Dutch and Norwegian parents and adults on alcohol policy measures and parental measures. Also, because different user groups (i.e. recent users, and respondents who never used illicit drugs) in Norway and the Netherlands were compared, the findings showed that own illicit drug use cannot be the only factor influencing the acceptance of illicit drug use; Norwegian and Dutch non-users also differed in their acceptance of illicit drug use. This implies that a more socio-cultural approach is needed to understand which factors influence the acceptance of illicit drug use.

Third, the results show that own alcohol consumption and own illicit drug use are strong related to how people perceive policy and parental measures, and the acceptance of illicit drug use.

However, the findings imply that other factors also play a role. Therefore, future research should also focus on which social and/or cultural aspects determine the opinions on policy and parental measures. Inclusion of more socio-cultural variables may help to elucidate the dynamics of how these opinions are formed. In addition, longitudinal monitoring of opinions on alcohol and illicit drug use and related policy

Summary

measures may help to reveal changing patterns in opinions on policy; this may contribute to more informed decision-making with regard to these policies.

Nevertheless, all these findings should be interpreted in the light of some methodological limitations. First, because the study was cross-sectional in design it does not allow to explore causal relationships. However, three chapters made cross-national comparisons which allow to examine additional issues, which would not be possible if the opinion had been asked within one country only. Other limitations were the difference in response rates between the Dutch and Norwegian samples, the overrepresentation of higher educated people in (particularly) the Norwegian sample, and the self-reported use of illicit drugs and alcoholic beverages with its implicit methodological shortcoming.

Although these limitations should be acknowledged and addressed, some policy implications can be proposed in relation to the findings of this thesis. For example, if governments aim at preventing young people from problematic drinking, approaching restrictive measures from the viewpoint that these measures are a proper way to prevent young people from drinking may enhance more support for these measures. Secondly, parents are willing to take parental measures to prevent young people from substance use, which strengthens the rationale for developing intervention programs involving parents.

Overall, this thesis indicates that there is not a strong relationship between national alcohol and drug policy measures and the opinion of citizens on policy measures in the Netherlands and in Norway. Although own substance use appears to have the strongest influence on one's opinion about substance use and related policy measures, it is not sufficient to explain all the variations in opinions on substance use and related policy measures.

Samenvatting

Samenvatting

Met name in Westerse landen is in de loop der jaren alcohol- en drugsbeleid ontwikkeld om de schadelijke effecten van alcohol- en drugsgebruik te verminderen. Dit beleid kan effectiever zijn als er draagvlak voor is onder de bevolking. Het doel van deze studie is daarom het onderzoeken van de opinie van burgers over alcohol- en drugsgebruik en alcohol- en drugsbeleid en de factoren die deze mening beïnvloeden in twee Westerse landen die verschillen in de mate van striktheid in hun alcohol- en drugsbeleid: Noorwegen en Nederland. Het alcohol- en drugsbeleid in deze landen verschilt, maar in sociaal en cultureel opzicht lijken Noorwegen en Nederland desondanks veel op elkaar.

Voor dit onderzoek zijn verschillende doelen geformuleerd. Ten eerste gaven de verschillen in het Nederlandse en Noorse alcoholbeleid de mogelijkheid om de invloed van verschillende factoren op de opinie van Noorse en Nederlandse burgers over het nationaal alcohol- en drugsbeleid te onderzoeken (**Hoofdstuk 2, 3 en 4**). Ten tweede is ook de opinie en mogelijke factoren die van invloed zijn op deze opinie in Nederland verder onderzocht en verkend (**Hoofdstuk 5 en 6**). De doelen die daarom voor dit onderzoek geformuleerd zijn, zijn als volgt:

1. Het onderzoeken van de opinie van Noorse en Nederlandse volwassenen over alcoholbeleidsmaatregelen die overmatig drankgebruik van jongeren kunnen verminderen.
2. Het onderzoeken van de mening van Nederlandse en Noorse ouders in hoeverre deze van elkaar verschillen als het gaat om het nemen van ouderlijke maatregelen om alcohol- en drugsgebruik bij jongeren tegen te gaan en hoe ouders uit beide landen aankijken tegen de verantwoordelijkheid van de overheid die zij op dit terrein zou moeten nemen.
3. Het verkennen van de mate van acceptatie van illegaal drugsgebruik van Noorse en Nederlandse volwassenen, in hoeverre deze van elkaar verschillen en welke factoren de acceptatie van illegaal drugsgebruik beïnvloeden.
4. Het vaststellen en vergelijken van de opinie van Nederlandse jongeren (16 tot 22 jaar) met die van Nederlandse volwassenen (> 22 jaar).
5. Het onderzoeken van de opinie van Nederlandse volwassenen over Nederlandse cannabisbeleidsmaatregelen en of de mate van populariteit van deze maatregelen afhangt van de mate in hoeverre men door deze maatregelen worden getroffen.

In november 2008 is via een cross-sectionele internet survey in Nederland als in Noorwegen data verzameld zowel. In Noorwegen was de onderzoekspopulatie onderdeel van een internetpanel. Voor deze studie waren 5,998 deelnemers geselecteerd en uiteindelijk hebben 2,150 respondenten aan het onderzoek deelgenomen. De non-

respons was 64%. Voor het verzamelen van de data in Nederland is een bestaand panel gebruikt. Dit panel bevatte 5,000 huishoudens en 8,280 panelleden. Aan deze studie hebben uiteindelijk 5,616 respondenten deelgenomen. De non-respons was 33%. De respondenten van beide steekproeven waren 16 jaar en ouder.

Hoofdstuk 2 verkent de opinie van Nederlandse en Noorse volwassenen (>23 jaar) over alcoholbeleidsmaatregelen die drankmisbruik bij jongeren kunnen verminderen. Hun opinie werd in dit kader gevraagd over restrictieve maatregelen en educatieve maatregelen. Onder restrictieve maatregelen werd verstaan het verhogen van de prijs van alcoholische dranken, een verbod op de verkoop van alcoholische dranken in supermarkten, een verbod op alcoholgebruik in het algemeen, een verbod op de verkoop van mixdranken zoals Breezers in supermarkten, een verbod op alcoholreclames en happy hours in cafés en disco's en het niet verkopen van alcoholische dranken op plaatsen waar veel jongeren samenkomen, zoals sportkantines. Educatieve maatregelen waren educatieve alcohol campagnes en schoolinterventieprogramma's in relatie tot alcoholgebruik.

Zowel de Nederlandse als de Noorse volwassenen waren positiever over de educatieve maatregelen dan over de restrictieve maatregelen die drankmisbruik bij jongeren kunnen tegengaan. De verschillen in opinie tussen de Nederlanders en de Noorse volwassenen waren klein. In beide landen waren respondenten die matig alcohol dronken (6-20 alcoholische consumpties per week) het meest negatief over restrictieve maatregelen. Ook jongere volwassenen en mannen waren negatiever over restrictieve maatregelen. Hoewel Noorwegen een strenger alcoholbeleid voert dan Nederland waren de verschillen tussen de opinies op deze beleidsmaatregelen klein.

Hoofdstuk 3 beschrijft de perceptie van Nederlandse en Noorse ouders over maatregelen die ouders kunnen nemen om alcohol- en drugsgebruik bij jongeren tegen te gaan en hoe zij aankijken tegen de verantwoordelijkheid van de overheid om maatregelen te nemen. Nederlandse en Noorse ouders werden geselecteerd uit de algehele Nederlandse en Noorse steekproef. De perceptie van ouders werd onderzocht door hun mening te vragen over verschillende soorten maatregelen die ouders kunnen nemen om alcohol- en drugsgebruik bij jongeren aan te pakken. Daarnaast werd ook hun mening gevraagd over het toestaan van alcoholgebruik, cannabisgebruik, en ander drugsgebruik. Tot slot werd gevraagd hoe zij aankijken tegen het nemen van verantwoordelijkheid als het gaat om het treffen van maatregelen.

Ouders van beide landen waren van mening dat ouders zich pro-actief op moeten stellen om alcohol- en drugsgebruik bij jongeren tegen te gaan. Ook vonden zij dat ouders meer verantwoordelijk waren voor het nemen van maatregelen dan de overheid. Verschillen tussen Nederlandse en Noorse ouders waren klein. Zowel Nederlandse als Noorse ouders vonden dat ouders maatregelen zouden moeten nemen. Ze voelden zich verantwoordelijk om alcohol- en drugsgebruik bij jongeren tegen te gaan.

Dit creëert mogelijkheden om ouders meer te betrekken bij interventies gericht op drank- en drugsgebruik bij jongeren.

Hoofdstuk 4 beschrijft de mate waarin illegaal drugsgebruik in de Nederlandse en Noorse samenleving is geaccepteerd. Om dit te onderzoeken is de normalisatie-thesis gebruikt als raamwerk. Deze thesis differentieert zes dimensies die gebruikt kunnen worden om de normalisatie van illegaal drugsgebruik te meten, met name onder jongeren. Dit hoofdstuk gaat vooral in op twee dimensies van dit raamwerk; de culturele en de sociale accommodatie van illegaal drugsgebruik. De acceptatie van illegaal drugsgebruik werd onderzocht onder de Nederlandse en Noorse bevolking en onder Nederlandse en Noorse volwassenen die nooit drugs hebben gebruikt en die recent drugs hebben gebruikt. De sociale en de culturele accommodatie werden geoperationaliseerd door het onderzoeken van de meningen over de acceptatie van illegale drugs. Deze waren onderverdeeld in i) wat de gedachten van de respondenten waren over de mate van acceptatie van illegale drugs, en ii) wat de respondenten ervoeren als 'normaal' als het ging om het illegaal drugsgebruik. Verder werd hun mening gevraagd over enkele beleidsmaatregelen.

Zowel de Nederlandse als de Noorse volwassenen waren terughoudend in het accepteren van illegaal drugsgebruik, hoewel bij de Nederlanders de acceptatie hoger was. Zij accepteerden illegale drugs meer als iets 'normaals' in de maatschappij dan de Noorse volwassenen. In beide landen werd cannabisgebruik meer geaccepteerd dan cocaïne- en heroïnegebruik. Wat betreft de nooit-gebruikers in beide landen werd illegaal drugsgebruik meer door de Nederlandse nooit-gebruikers dan door de Noorse nooit-gebruikers geaccepteerd. Dit indiceert dat behalve eigen gebruik, ook andere meer sociaal-culturele factoren gerelateerd zijn aan de mate waarin illegaal drugsgebruik wordt geaccepteerd.

Hoofdstuk 5 beschrijft hoe Nederlandse jongeren (16-22 jaar) en Nederlandse volwassenen (> 22 jaar) denken over restrictieve alcoholbeleidsmaatregelen en educatieve maatregelen die erop gericht zijn om problematisch drankgebruik onder jongeren te verminderen. Restrictieve maatregelen bestonden uit het verhogen van de prijs van alcoholische dranken, een verbod op de verkoop van alcoholische dranken in supermarkten, een verbod op alcoholgebruik in het algemeen, een verbod op de verkoop van mixdranken zoals Breezers in supermarkten, een verbod op alcoholreclames, een verbod op happy hours in cafés en disco's en het niet verkopen van alcoholische dranken op plaatsen waar veel jongeren samenkomen, zoals sportkantines. Educatieve maatregelen waren educatieve alcohol campagnes en schoolinterventieprogramma's in relatie tot alcoholgebruik.

Restrictieve maatregelen waren minder populair dan de educatieve maatregelen zowel onder de jongeren als ook onder de volwassenen. De jongeren waren negatiever over de restrictieve maatregelen dan volwassenen. Het eigen gebruik was de grootste

voorspeller voor het bepalen van de opinie over deze beperkende maatregelen; matige drinkers waren het meest negatief. Leeftijd was positief gerelateerd aan de opinie over zowel educatieve als de restrictieve maatregelen. Dit effect was het meest zichtbaar voor de restrictieve maatregelen.

In **hoofdstuk 6** wordt de opinie van Nederlandse volwassenen over maatregelen die deel uit maken van het Nederlands cannabisbeleid weergegeven. Daarnaast wordt in dit hoofdstuk beschreven in hoeverre de populariteit van deze maatregelen afhangt van de mate waarin mensen door de maatregelen worden beperkt. De maatregelen bestonden uit beperkende beschikbaarheidsmaatregelen zoals het toestaan van de verkoop van cannabis in coffeeshops, de locatie van coffeeshops, het monitoren van de verkoop van cannabis aan jongeren onder de 18 jaar, en een verbod op cannabisgebruik. Andere beleidsmaatregelen waren educatieve maatregelen als educatieve drugs campagnes en schoolinterventieprogramma's over drugsgebruik. De mate waarin mensen door de maatregelen werden beperkt werd gemeten aan de hand van eigen cannabisgebruik en cannabisgebruik in het sociale netwerk.

Educatieve preventieve maatregelen waren populair. De maatregelen die de beschikbaarheid van cannabis beperkten waren minder populair onder cannabisgebruikers dan onder niet-cannabisgebruikers. Het hebben van cannabisgebruikers in iemands sociale netwerk beïnvloedde de mening over beperkende maatregelen, maar het eigen gebruik bleef de belangrijkste voorspeller. Deze resultaten impliceerden dat de mate waarin iemand door een bepaalde maatregel werd geraakt, de mening over deze maatregel beïnvloedde.

In **hoofdstuk 7** worden de belangrijkste bevindingen samengevat en bediscussieerd, gevolgd door methodologische overwegingen en implicaties voor beleid en verder onderzoek. Dit proefschrift concentreerde zich op de opinie van Nederlandse en Noorse burgers over alcohol- en drugsgebruik en alcohol- en drugsbeleid en de factoren die deze opinie beïnvloedden. De reflectie op de belangrijkste resultaten is driedig.

Ten eerste zijn de verschillen tussen opinie van Nederlandse en Noorse burgers over alcoholbeleidsmaatregelen die problematisch drankgebruik bij jongeren kunnen tegengaan en de opinie over maatregelen die ouders kunnen nemen om alcohol- en drugsgebruik bij jongeren tegen te gaan, klein. De striktheid van het nationale alcohol- en drugsbeleid lijkt daarom niet leidend te zijn in het verklaren van deze opinie. Sociale en culturele factoren spelen wellicht een grote rol.

Ten tweede, de verschillen tussen de Nederlandse en Noorse populatie over de mate van acceptatie van illegale drugs waren groter vergeleken met de verschillen tussen de opinie over alcoholbeleidsmaatregelen en ouderlijke maatregelen. Omdat de mate van acceptatie van illegaal drugsgebruik ook is gemeten onder verschillende gebruikersgroepen, zoals recente gebruikers en respondenten die nooit hadden

gebruikt, kon worden aangetoond dat eigen drugsgebruik niet de enige factor kon zijn die de mate van acceptatie beïnvloedde. Want, ook Noorse en Nederlandse burgers die nooit hadden gebruikt verschilden in de mate van acceptatie van illegaal drugsgebruik. Dit impliceert dat een meer sociaal-culturele benadering wellicht nodig is om te begrijpen welke factoren de acceptatie van illegale drugs onder de bevolking beïnvloeden.

Ten derde laten de bevindingen zien dat eigen alcohol- en drugsgebruik gerelateerd is aan hoe zowel Noorse als Nederlandse burgers denken over beleidsmaatregelen en ouderlijke maatregelen, en in hoeverre zij illegaal drugsgebruik accepteren.

Echter, de resultaten laten ook zien dat andere factoren mogelijk een rol spelen in het vormen van de opinie. Toekomstig onderzoek zou daarom ook meer moeten focussen op de sociale en culturele aspecten die mogelijk samenhangen met de opinie over alcohol- en drugsgebruik en gerelateerde beleidsmaatregelen. Het includeren van meer sociaal-culturele variabelen kan bijdragen aan het antwoord op de vraag waardoor deze opinie nog mede wordt gevormd. Een andere implicatie is dat het longitudinaal monitoren van de mening over alcohol- en drugsgebruik en gerelateerde beleidsmaatregelen inzicht kan geven in hoe de opinie over beleidsmaatregelen door de tijd verandert. Dit kan bijdragen aan het nemen van verantwoorde beleidsbeslissingen.

Desalniettemin moeten de bevindingen geïnterpreteerd worden in het licht van enkele beperkingen. Ten eerste had de studie een cross-sectioneel design. Dit design geeft niet de mogelijkheid om causale verbanden aan te tonen. Echter, drie hoofdstukken focusten op een cross-nationale vergelijking. Dit gaf de mogelijkheid om bepaalde kwesties verder te onderzoeken die bij het verkennen van de opinie in één enkel land niet mogelijk was geweest. Andere beperkingen waren dat de respons tussen de Nederlandse en Noorse onderzoeksgroep verschilden, dat met name in Noorse sample meer hoog opgeleide respondenten waren geïncludeerd en dat het alcohol- en drugsgebruik gebaseerd was op eigen rapportage.

Hoewel deze beperkingen benoemd moeten worden, kunnen in relatie tot de bevindingen wel verschillende implicaties voor beleid worden geformuleerd. Als de overheid problematisch gebruik onder jongeren wil tegengaan, dan is het aan te bevelen om bij de implementatie van restrictievere maatregelen te benadrukken dat de maatregelen worden ingevoerd ter preventie van alcoholmisbruik bij jongeren. Dit kan de support onder volwassenen voor deze maatregelen verhogen. Daarnaast blijkt uit de bevindingen dat ouders bereid zijn om maatregelen te nemen; dit opent deuren om ouders bij interventies te betrekken.

Tot slot, dit proefschrift laat zien dat er in Nederland en Noorwegen geen sterke relatie is tussen het nationale alcohol en drugsbeleid en de opinie van Noors en Nederlandse burgers over deze maatregelen. Hoewel eigen gebruik de mening over alcohol- en drugsgebruik en gerelateerd beleid het meest beïnvloedt, is het niet voldoende om alle variatie in de opinie hierover volledig te verklaren.

Appendix 1: Questionnaire

Appendix 1

Vragenlijst

Deze vragenlijst gaat over alcohol en drugs.

Bij de volgende vragen willen we graag weten wat jij vindt, niet wat volgens de wet wel of niet mag

► 1. Vanaf welke leeftijd vind je het acceptabel dat:

	leeftijd	op geen enkele leeftijd
...iemand af en toe cannabis (hasj en wiet) gebruikt	—	<input type="checkbox"/>
...iemand regelmatig cannabis gebruikt	—	<input type="checkbox"/>
...iemand af en toe cocaïne gebruikt	—	<input type="checkbox"/>
...iemand regelmatig cocaïne gebruikt	—	<input type="checkbox"/>
...iemand af en toe heroïne gebruikt	—	<input type="checkbox"/>
...iemand regelmatig heroïne gebruikt	—	<input type="checkbox"/>
...iemand af en toe alcohol drinkt	—	<input type="checkbox"/>
...iemand regelmatig alcohol drinkt	—	<input type="checkbox"/>
...iemand af en toe een beetje aangeschoten is	—	<input type="checkbox"/>
...iemand af en toe dronken is	—	<input type="checkbox"/>

► 2. In welke mate ben je het wel of niet eens met de volgende stellingen?

	helemaal oneens	oneens	niet eens/ niet oneens	eens	helemaal eens
Vooraf ouders zijn verantwoordelijk voor het nemen van maatregelen omtrent het drank gebruik van hun kinderen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vooraf de overheid is verantwoorde- lijk voor het nemen van maatregelen omtrent het drank gebruik door jongeren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vooraf ouders zijn verantwoordelijk voor het nemen van maatregelen omtrent het drugs gebruik van hun kinderen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vooraf de overheid is verantwoorde- lijk voor het nemen van maatregelen omtrent het drugs gebruik door jongeren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

► 3. Wil je aangeven of je over het algemeen het overheidsbeleid met betrekking tot de volgende punten te soepel vindt, goed vindt zoals het is of te streng vindt?

	te soepel	goed zoals het is	te streng	weet ik niet
Overheidsbeleid op het gebied van alcoholgebruik door jongeren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overheidsbeleid op het gebied van cannabisgebruik door jongeren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overheidsbeleid op het gebied van drugsgebruik door jongeren, zoals cocaïne en heroïne	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

►4. Hieronder mag je leeftijden invullen. Je mag alle leeftijden kiezen, het gaat erom wat jij vindt, niet wat volgens de wet wel of niet mag.

	leeftijd	op geen enkele leeftijd
De minimumleeftijd waarop iemand alcohol mag kopen, zou moeten zijn:	—	<input type="checkbox"/>
De minimumleeftijd waarop iemand cannabis in een coffeeshop mag kopen, zou moeten zijn:	—	<input type="checkbox"/>

►5. Hieronder staan stellingen met maatregelen die ouders kunnen nemen om te voorkomen dat jongeren alcohol of drugs gaan gebruiken. In welke mate sta je achter deze maatregelen? (het gaat erom wat jij vindt en niet om wat volgens de wet wel of niet mag)

	helemaal oneens	oneens	niet eens/ niet oneens	eens	helemaal eens
Ouders moeten wat betreft alcoholgebruik het goede voorbeeld aan hun kinderen geven	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders moeten wat betreft drugsgebruik het goede voorbeeld aan hun kinderen geven	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders moeten hun kinderen voorlichten over alcoholgebruik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders moeten hun kinderen voorlichten over drugsgebruik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	helemaal oneens	oneens	niet eens/ niet oneens	eens	helemaal eens
Een ouder moet een jongere onder de 16 jaar geen alcohol geven	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders moeten niet aangeschoten zijn in het bijzijn van hun kinderen jonger dan 16 jaar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders moeten duidelijke regels stellen aan hun kind onder de 16 jaar met betrekking tot alcoholgebruik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders moeten hun kinderen jonger dan 16 jaar vrijlaten in hun keuze wel of geen alcohol te drinken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders zouden hun kind jonger dan 16 jaar moeten toestaan thuis onder ouderlijk toezicht te drinken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders moeten met hun kind jonger dan 16 jaar praten over elkaars meningen over alcoholgebruik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	helemaal oneens	oneens	niet eens/ niet oneens	eens	helemaal eens
Ouders moeten duidelijke regels stellen aan hun kind jonger dan 18 jaar met betrekking tot drugsgebruik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders moeten hun kinderen jonger dan 18 jaar vrijlaten in hun keuze om wel of geen cannabis te gebruiken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders moeten hun kinderen jonger dan 18 jaar vrijlaten in hun keuze om wel of geen andere soorten drugs te gebruiken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix 1

Ouders zouden hun kind jonger dan 18 jaar moeten toestaan thuis onder ouderlijk toezicht cannabis te gebruiken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders zouden hun kind jonger dan 18 jaar moeten toestaan thuis onder ouderlijk toezicht andere soorten drugs te gebruiken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouders moeten met hun kind jonger dan 18 jaar praten over elkaars meningen over drugsgebruik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

►6. Hieronder staan stellingen met maatregelen die de overheid kan nemen om te voorkomen dat jongeren alcohol of drugs gaan gebruiken. In welke mate sta je achter deze maatregelen? (het gaat erom wat jij vindt en niet om wat volgens de wet wel of niet mag)

	helemaal oneens	oneens	niet eens/ niet oneens	eens	helemaal eens
De prijs van alcohol moet worden verhoogd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alcoholreclame moet helemaal verboden zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Happy hours in cafés en disco's moeten worden verboden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supermarkten moeten geen mixdranken zoals Breezers verkopen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supermarkten moeten helemaal geen alcoholische dranken verkopen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alcohol moet niet verkocht worden op plaatsen waar veel jongeren onder de 16 jaar komen, zoals sportkantines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De overheid moet jongeren vrijlaten in hun keuze om wel of geen alcohol te drinken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De overheid moet alcoholvoorlichtings - campagnes voeren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De overheid moet zorgen dat in het onderwijs alcoholvoorlichting wordt gegeven	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De overheid moet actief controleren of er verkocht wordt aan jongeren onder de wettelijke minimumleeftijd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het drinken van alcohol door iemand jonger dan 16 jaar moet worden bestraft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Als de politie een jongere onder de 16 jaar met alcohol aantreft, moet zij contact opnemen met de ouders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	helemaal oneens	oneens	niet eens/ niet oneens	eens	helemaal eens
Het moet toegestaan zijn om cannabis in coffeeshops te verkopen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coffeeshops moeten niet gevestigd zijn in de buurt van scholen voor het voortgezet onderwijs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De overheid moet drugsvoorlichtingscampagnes voeren	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De overheid moet zorgen dat in het onderwijs drugsvoorlichting wordt gegeven	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Questionnaire

De overheid moet jongeren vrijlaten in hun keuze om wel of geen cannabis te gebruiken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De overheid moet jongeren vrijlaten in hun keuze om wel of geen andere soorten drugs te gebruiken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De overheid moet actief controleren of er in coffeeshops cannabis wordt verkocht aan jongeren onder de 18 jaar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De overheid moet actief controleren of er andere soorten drugs aan jongeren worden verkocht	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het gebruik van cannabis door iemand jonger dan 18 jaar moet worden bestraft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het gebruik van andere soorten drugs door iemand jonger dan 18 jaar moet worden bestraft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Als de politie een jongere onder de 18 jaar met cannabis aantreft, moet zij contact opnemen met de ouders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Als de politie een jongere onder de 18 jaar met andere soorten drugs aantreft, moet zij contact opnemen met de ouders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	helemaal oneens	oneens	niet eens/ niet oneens	eens	helemaal eens
Alcoholgebruik moet verboden zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cannabisgebruik moet verboden zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gebruik van andere soorten drugs moet verboden zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

► 7. Hieronder willen we graag wat meer weten over **jouw opvattingen** over drugs. In hoeverre ben je het met de volgende stellingen eens of oneens? Gebruik de schaal van 1-7, waarbij 1=helemaal mee oneens en 7=helemaal mee eens.

	helemaal mee oneens	1	2	3	4	5	6	helemaal mee eens
Cannabis is tegenwoordig gemakkelijk te verkrijgen in Nederland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cocaïne is tegenwoordig gemakkelijk te verkrijgen in Nederland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heroïne is tegenwoordig gemakkelijk te verkrijgen in Nederland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	helemaal mee oneens	1	2	3	4	5	6	helemaal mee eens
Cannabis wordt tegenwoordig in Nederland door relatief veel mensen gebruikt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cocaïne wordt tegenwoordig in Nederland door relatief veel mensen gebruikt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heroïne wordt tegenwoordig door relatief veel mensen gebruikt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix 1

	helemaal mee oneens					helemaal mee eens	
	1	2	3	4	5	6	7
Cannabis gebruik wordt door velen geaccepteerd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cocaïne gebruik wordt door velen geaccepteerd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heroïne gebruik wordt door velen geaccepteerd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	helemaal mee oneens					helemaal mee eens	
	1	2	3	4	5	6	7
Dat iemand cannabis gebruikt zou moeten worden geaccepteerd in een maatschappij als de Nederlandse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dat iemand cocaïne gebruikt zou moeten worden geaccepteerd in een maatschappij	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dat iemand heroïne gebruikt zou moeten worden geaccepteerd in een maatschappij als de Nederlandse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	helemaal mee oneens					helemaal mee eens	
	1	2	3	4	5	6	7
Cannabis is iets blijvends in Nederland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cocaïne is iets blijvends in Nederland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heroïne is iets blijvends in Nederland	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	helemaal mee oneens					helemaal mee eens	
	1	2	3	4	5	6	7
Een Nederlandse samenleving zonder cannabis is ondenkbaar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Een Nederlandse samenleving zonder cocaïne is ondenkbaar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Een Nederlandse samenleving zonder heroïne is ondenkbaar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

►8. Drugsbeleid is een moeilijk thema dat veel mensen in Nederland aangaat. Niet alle maatregelen kunnen worden uitgevoerd. We vragen je na te denken over onderstaande maatregelen. In welke mate ben je het eens of oneens met de stellingen?

	helemaal mee oneens					helemaal mee eens	
	1	2	3	4	5	6	7
De straffen voor drugsovertredingen zouden enorm moeten worden verhoogd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De controle op drugsgebruik zou veel strenger moeten zijn dan nu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De controle op drugsbezit zou veel strenger moeten zijn dan nu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
De controle op drugshandel zou veel strenger moeten zijn dan nu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het opsluiten van drugsgebruikers is het meest effectieve beleid om drugs te bestrijden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het opsluiten van drugsdealers is het meest effectieve beleid om drugs te bestrijden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Er zijn in Nederland te strenge regels rondom softdrugsgebruik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Er zijn in Nederland te strenge regels rondom harddrugsgebruik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het onderscheid in de wet tussen soft- en harddrugs zou moeten blijven	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drugsgebruik zou legaal moeten zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verhogen van de strafmaat heeft weinig of geen effect op het aantal drugsgebruikers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Burgers zouden vrij moeten zijn in hun keuze om wel of geen drugs te gebruiken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	helemaal mee oneens					helemaal mee eens	
	1	2	3	4	5	6	7
Het drugsprobleem zou in de eerste plaats als een moreel probleem moeten worden beschouwd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het drugsprobleem zou in de eerste plaats als een crimineel probleem moeten worden beschouwd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het drugsprobleem zou in de eerste plaats als een gezondheidsprobleem moeten worden beschouwd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het drugsprobleem zou in de eerste plaats als een sociaal probleem moeten worden beschouwd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix 1

	helemaal mee oneens						helemaal mee eens
	1	2	3	4	5	6	7
Aan mensen met drugsproblemen zou op grotere schaal dan nu gebeurt behandeling moeten worden aangeboden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medische behandeling van mensen met drugsproblemen (zoals methadon-verstrekking) zou vaker moeten worden toegepast	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Politici besteden te weinig geld aan de behandeling van mensen met drugsproblemen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Politici besteden te weinig geld aan huisvesting voor mensen met drugsproblemen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Politici besteden te weinig geld aan gezondheidszorg voor mensen met drugsproblemen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drugsgebruikers zouden schone naalden moeten krijgen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mensen met drugsproblemen zouden een gedwongen behandeling moeten krijgen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	heel zelden						heel vaak
	1	2	3	4	5	6	7
Hoe vaak heb je de laatste tijd met familie, vrienden en collega's gesproken over kwesties op het gebied van drugsbeleid?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	voor een klein deel						voor een groot deel
	1	2	3	4	5	6	7
Denk je dat jouw opvattingen over het drugsbeleid hetzelfde zijn als die van de sociale groep waar je bij hoort of bij zou willen horen?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	voor een klein deel						voor een groot deel
	1	2	3	4	5	6	7
In welke mate zijn jouw opvattingen over het drugsbeleid gevormd door jouw eigen persoonlijke mening?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	heel weinig						heel veel
	1	2	3	4	5	6	7
In hoeverre volg je het nieuws in de media (televisie, krant) over het drugsbeleid?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Questionnaire

	helemaal mee oneens						helemaal mee eens	
	1	2	3	4	5	6	7	
Ik heb het volste vertrouwen in het Nederlandse drugsbeleid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

►9. Kun je aangeven of de volgende stellingen voor jouw situatie gelden?

	nee, nooit	ja, soms	ja, vaak
Bij mij thuis is alcohol aanwezig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bij mij thuis is cannabis aanwezig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bij mij thuis zijn andere soorten drugs aanwezig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bij mij thuis praat men over alcoholgebruik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bij mij thuis praat men over drugsgebruik	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

►10. Heb je vrienden of familie die:

	nee	ja, één persoon	ja, meerdere personen
...cannabis hebben gebruikt?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...cocaïne hebben gebruikt?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...heroïne hebben gebruikt?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

►11. Ken je iemand anders die:

	nee	ja, één persoon	ja, meerdere personen
...cannabis heeft gebruikt?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...cocaïne heeft gebruikt?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...heroïne heeft gebruikt?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

►12. Ik vind het acceptabel als mijn vrienden:

	helemaal oneens	oneens	niet eens/ niet oneens	eens	helemaal eens
...af en toe alcohol drinken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...af en toe cannabis gebruiken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...af en toe cocaïne gebruiken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...af en toe heroïne gebruiken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

►13. Had je of heb je mensen in je naaste omgeving waarvan jij vindt dat:

	nee	ja, één persoon	ja, meerdere personen
...het alcoholgebruik problematisch is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...het cannabisgebruik problematisch is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...het gebruik van andere soorten drugs problematisch is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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► 14. Heb je ooit:

	ja	nee
...tabak gerookt	<input type="checkbox"/>	<input type="checkbox"/>
...alcohol gedronken	<input type="checkbox"/>	<input type="checkbox"/>
...cannabis gebruikt	<input type="checkbox"/>	<input type="checkbox"/>
...ecstasy (XTC) gebruikt	<input type="checkbox"/>	<input type="checkbox"/>
...cocaine gebruikt	<input type="checkbox"/>	<input type="checkbox"/>
...heroïne gebruikt	<input type="checkbox"/>	<input type="checkbox"/>

► 15. Op welke leeftijd heb je voor het eerst::

...tabak gerookt	—
...alcohol gedronken	—
...cannabis gebruikt	—
...ecstasy gebruikt	—
...cocaine gebruikt	—
...heroïne gebruikt	—

► 16. Hoe vaak heb je in de afgelopen 30 dagen:

	gemiddeld per week 6-7 dagen	gemiddeld per week 2-5 dagen	gemiddeld per week 1 dag	gemiddeld per week minder dan 1 dag	geen enkele keer
...tabak gerookt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...alcohol gedronken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...cannabis gebruikt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...ecstasy gebruikt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...cocaine gebruikt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
...heroïne gebruikt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

► 17. Als je op doordeweekse dagen (maandag tot en met donderdag) alcohol drinkt, op hoeveel van de 4 dagen drink je dan over het algemeen?

- ☐ Ik drink over het algemeen niet op doordeweekse dagen (het systeem moet vraag 18 overslaan)
- ☐ 1 dag
- ☐ 2 dagen
- ☐ 3 dagen
- ☐ 4 dagen

► 18. Hoeveel glazen alcohol drink je gemiddeld op zo'n doordeweekse dag?

- standaardglazen bier (25 cl)
- standaardglazen wijn
- standaardglazen sterke drank
- glazen of flesjes mix-dranken

►19. Als je in het weekend (vrijdag tot en met zondag) alcohol drinkt, op hoeveel van de 3 week-
enddagen drink je dan over het algemeen?

- ☐ Ik drink over het algemeen niet op weekenddagen
☐ 1 dag
☐ 2 dagen
☐ 3 dagen

►20. Hoeveel glazen alcohol drink je gemiddeld op zo'n weekenddag?

- ___ standaardglazen bier (25 cl)
 ___ standaardglazen wijn
 ___ standaardglazen sterke drank
 ___ glazen of flesjes mix-dranken

►21. Hieronder staan enkele kenmerken van typen vrouwen/mannen. Lees ieder kenmerk en
bedenk in hoeverre deze persoon op jou lijkt.

	lijkt erg veel op mij	lijkt op mij	lijkt wel iets op mij	lijkt een heel klein beetje op mij	lijkt niet op mij	lijkt helemaal niet op mij
Hij/zij vindt dat mensen moeten doen wat ze gezegd wordt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hij/zij vindt dat mensen altijd wetten en regels moeten volgen, ook al is er niemand die het ziet.						
Het is voor hem/haar belangrijk om rijk te zijn. Hij/zij wil veel geld en dure dingen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het is voor hem/haar belangrijk om succesvol te zijn. Hij/zij wil dat anderen waarderen wat hij/zij bereikt.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tradities zijn voor hem/haar belangrijk. Hij/zij probeert religieuze- en familie- tradities te volgen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het is voor hem/haar belangrijk om plezier te hebben. Hij/zij houdt ervan zichzelf te verwennen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hij/zij houdt van avontuur en durft risico's te nemen. Hij/zij wil een opwindend leven.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het is voor hem/haar belangrijk om zelf te beslissen wat te doen. Hij/zij wil vrij zijn en niet afhankelijk zijn van anderen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Het is voor hem/haar erg belangrijk om de mensen om hem/haar heen te helpen.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hij/zij wil aan hun geluk bijdragen. Hij/zij heeft aandacht voor religieuze zaken.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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►22. Als er vandaag verkiezingen voor de Tweede Kamer zouden zijn, op welke partij zou je dan stemmen?

- ☐ Ik zou niet stemmen
- ☐ Ik ben niet stemgerechtigd
- ☐ CDA (Christen Democratisch Appèl)
- ☐ PvdA (Partij van de Arbeid)
- ☐ VVD (Volkspartij voor Vrijheid en Democratie)
- ☐ SP (Socialistische Partij)
- ☐ GroenLinks
- ☐ D66 (Democraten '66)
- ☐ ChristenUnie
- ☐ SGP (Staatkundig Gereformeerde Partij)
- ☐ Trots op Nederland (Groep Verdonk)
- ☐ PVV (Partij voor de Vrijheid / Groep Wilders)
- ☐ PvdD (Partij voor de Dieren)
- ☐ andere partij
- ☐ blanco
- ☐ Wil ik niet zeggen
- ☐ Weet ik niet

►23. Vragen/opmerkingen:

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In mijn dankwoord van mijn doctoraalscriptie schreef ik als eerste zin 'Ik ben af.' Ik was blij dat ik na het HBO de stap had genomen om naar de universiteit te gaan en dat ik het met goed resultaat had afgerond. Had ik toen geweten dat ik ooit nog zou promoveren, dan had ik dat misschien niet eens opgeschreven. Drie jaar geleden kon ik het alsnog niet laten een nieuwe uitdaging aan te gaan. En daar heb ik geen moment spijt van gehad. Het was in vele opzichten een investering: De trein werd mijn tweede thuis, mijn laptop werd mijn grote vriend en mijn wekker moedigde mij elke ochtend op tijd weer aan om deze klus te klaren. Maar alles was het was meer dan waard.

De begeleiding bij Tranzo, de interesse van vrienden en familie, de steun van Richard; het heeft mij scherp gehouden. Om maar te starten bij Tranzo. Henk, Ien en Evelien, jullie waren een goed team. Met Henk zette ik de lijnen uit, Ien stelde de vraag of ik die lijn wel vasthield en Evelien keek op detailniveau mee of ik het allemaal wel juist verwoordde. Henk, eigenlijk heb ik je maar één woord te zeggen: bedankt! Je gaf me de mogelijkheid om te promoveren. Vanaf het begin heb je er vertrouwen in gehad dat het zou lukken. Een vraag was je nooit te veel en als ik even wilde 'sparren' dan was er altijd een moment te vinden. Ien, jouw kritische helikopter-view was waardevol. Je vragen en reflectie hielpen mij om bij de kern te blijven. Evelien, je was altijd even enthousiast. Je 'gepriegel' tussen de lijntjes op mijn ingeleverde versies van mijn artikelen gaven mij vaak weer een duw in de goede richting.

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Ik ben nu klaar met mijn promotie-onderzoek. Jij moet nog even, maar het gaat je zeker lukken!

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Rosalie van der Sar, augustus 2012
Carpe diem

About the author

About the author

Rosalie van der Sar (Vlaardingen, the Netherlands, 1980) graduated from pre-university-education (gymnasium) at CSG Aquamarijn in 1998. In September 1998 she started the bachelor Nutrition and Dietetics at the Haagse Hogeschool and continued her education with Health Sciences at Maastricht University in 2002. She graduated from her university education (specialization Health Promotion and Health Education) in 2004.

In 2005 she started to work at The Netherlands Organisation for Health Research and Development (ZonMw) as program-assistant and interim program officer on the research program 'Collaborative Centers for Public Health'. In 2008, she worked for one year as a research-assistant at the Institute of Public Health in Copenhagen, Denmark and continued part-time working as program officer at ZonMw.

In March 2009 she started her PhD research at Tilburg University, department Tranzo. The research focused on the opinion of Dutch and Norwegian substance use and related policy measures. The findings of this work are described in this thesis. Besides her work as a researcher she was also member of the Faculty board of the Tilburg School of Social and Behavioral Sciences at Tilburg University.

Rosalie is married to Richard and mother of Thijs (April 2012).

Over de auteur

Rosalie van der Sar (Vlaardingen, 1980) behaalde in 1998 haar Gymnasium-diploma aan het CSG Aquamarijn. In september 1998 startte zij met haar studie Voeding en Diëtetiek aan de Haagse Hogeschool. In september 2002 begon zij aan de studie Gezondheidswetenschappen aan Maastricht University. Haar afstudeerrichting was Gezondheidsvoorlichting. In 2004 rondde ze deze studie af.

In 2005 begon zij bij ZonMw en werkte als programma-assistent en later als waarnemend programma-secretaris op het programma Academische Werkplaatsen Publieke Gezondheid. In 2008 werkte zij een jaar als onderzoeker-assistent bij het Institute of Preventive Medicine in Kopenhagen, Denemarken en deels als programmasecretaris op afstand bij ZonMw.

In maart 2009 startte zij haar promotietraject bij Tranzo aan Tilburg University. In dit onderzoek stond de opinie van Nederlandse en Noorse burgers over alcohol- en drugsgebruik en alcohol- en drugsbeleid centraal. De resultaten van de onderzoek staan beschreven in dit proefschrift. Naast haar werk als onderzoeker was zij ook lid van de faculteitsraad van de Tilburg School of Social and Behavioral Sciences aan Tilburg University.

Rosalie is getrouwd met Richard en moeder van Thijs (april 2012).